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VOLUME IV. *NUMBER 11.*

BULLETIN 46.

WEST VIRGINIA

AGRICULTURAL EXPERIMENT STATION.

Fertilizer Analyses.

B. H. HITE.

DECEMBER, 1896.

FAIRMONT:
INDEX STEAM PRINTING HOUSE.
1897.

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TO MANUFACTURERS OF FERTILIZERS.

Manufacturers of Commericial Fertilizers, selling their goods in this State, will please observe the following points in complying with the Act of the Legislature of West Virginia, passed March 6th, 1891, and now in force:

1. A compliance with the law requires that before any commercial fertilizer is sold, offered or exposed for sale in this State, the manufacturer, importer or party who causes it to be sold, exposed or offered for sale, shall file an affidavit with the Director of the West Virginia Agricultural Experiment Station, at Morgantown, W. Va., giving a correct statement of the net pounds in the package, the names of the brands or trade-mark under which the fertilizer is sold, the name and address of the manufacturer, the place of the manufacture, and the chemical analysis stating the percentage of nitrogen, or its equivalent in ammonia, the percentage of potash soluble in distilled water, and the percentage in phosphoric acid in available form, soluble in distilled water, and reverted, as well as the total phosphoric acid. In the case of those fertilizers which consist of other cheaper materials, the affidavit shall give a correct general statement of the composition and ingredients of the elements in the fertilizer relied upon to produce fertilizing effect upon the soil.

2. The manufacturer is required to send with the affidavit a fair sample of the fertilizer in a sealed jar, bottle or tin can for analysis. An ordinary quart fruit jar or can filled with a fair sample of the fertilizer will answer. Each can or jar should be properly sealed, labled and packed and shipped prepaid by express to Dr. John A. Myers, Morgantown, West Virginia.

3. The manufacturer is required to pay at the time of filing the affidavit an analysis fee of $10 for each and every fertilizing

ingredient claimed by him. If he claims potash, phosphoric acid and nitrogen, it is $10 for each, or $30 for a complete fertilizer, consisting of all three of the above named elements of plant food. The fee should be sent by draft upon New York or Baltimore, payable to the "Treasurer of the West Virginia University."

4. The manufacturer is required to place a label or tag upon each package, giving the name of the brand, its correct net weight, analysis and commercial valuation per ton. These labels are provided only by the Director of the West Virginia Experiment Station, are regularly numbered and can only be had by the parties filing the affidavit before mentioned. The law establishes the price at 50¢ per 100 labels or tags. Manufacturers requiring these tags or labels should indicate to the Director the number of each kind required, and send a check payable to John A. Myers, Director, for the amount. They will be sold in packages of 100 each, and the manufacturers will please order by even hundreds.

5. All certificates of analysis expire with December 31st of the year in which they are issued and must be renewed as soon as possible.

Manufacturers and agents will therefore please take immediate steps to comply with the above indicated provisions, which are intended for to guide them. The Director will furnish the necessary blanks for complying with the law, free of charge, and will aid the manufacturers in any way in his power to comply with its requirements. All affidavits and applications for labels should be filed as soon as possible. Address all communications to

DR. JOHN A. MYERS,
Morgantown, W. Va.

Dec. 1896.

An Act Concerning Commercial Fertilizers.

STATE OF WEST VIRGINIA.

CHAPTER LXXII.

AN ACT concerning Commercial Fertilizers and repealing chapter Twenty-five of the acts of the Legislature of West Virginia of 1879.

[Passed March 6, 1891.]

Be it enacted by the Legislature of West Virginia:

1. Every person or company who shall sell, offer or expose for sale in this State, any commercial fertilizer or manure, shall affix conspicuously to every package thereof a plainly printed statement, clearly and truly certifying the number of net pounds of fertilizer in the package, the name, brand or trade-mark under which the fertilizer is sold, the name and address of the manufacturer, the place of manufacture, and a chemical analysis, stating the percentage of nitrogen or its equivalent in ammonia, of potash soluble in distilled water, and of phosphoric acid in available form, soluble in distilled water, and reverted, as well as the total phosphoric acid. In the case of those fertilizers which consist of other cheaper materials, said labels shall give a correct general statement of the composition and ingredients of the elements relied upon, contained in the fertilizer which it accompanies. If any such fertilizer be sold in bulk, such printed statement shall accompany and go with every lot and parcel sold, offered or exposed for sale.

2. Before any commerical fertilizer is sold, offered or exposed for sale in this State, the manufacturer, importer or party who causes it to be sold, exposed or offered for sale, shall file with the Director of the West Virginia Agricultural Experiment Station a certified copy of the statement named in section one of this Act, and shall also deposit with said Director, a sealed glass jar or bottle, or sealed tin can, containing not less than one pound of fertilizer named and described in said statement, accompanied by an affidavit that it is a fair average

sample thereof. The making of any affidavit required by this chapter falsely, shall be perjury.

3. The manufacturer, importer, agent or seller of any brand of commerical fertilizer or material used for manurial purposes, shall pay for each brand at the time he files the statement required in section one of this Act, an analysis fee of ten dollars for each of the fertilizing ingredients claimed to exist in each and every brand as fertilizer which he sells, offers or exposes for sale within this State, provided that whenever the manufacturer, or importer shall have paid the analysis fee herein required, for any particular brand of fertilizer, no agent or seller shall be required to pay any other or further analysis fee for said brand.

4. The analysis fee required to be paid by section three of this Act shall be paid to the Treasurer of the West Virginia University for the use of the Agricultural Experiment Station, and the party making such payments shall take from said Treasurer triplicate receipts therefor, one of which he shall retain, and the others shall be deposited, one with the Director of the Agricultural Experiment Station, and the other with the Secretary of the Board of Regents of the West Virginia University, and by them filed and preserved in their respective offices.

5. Immediately after the filing of the receipt aforesaid with the director of the Agricultural Experiment Station, said Director shall issue a certificate to the party-making such payment, stating the amount of fees paid, and the name, brand of trade-mark under which the fertilizer is sold, the name and address of the manufacturer or importer, the place of manufacture and the name and place of business of the dealer, and chemical analysis as set forth in the statement by section one of this Act, and that the applicant for said certificate is authorized to sell said fertilizer within the State of West Virginia for the period of one year from the first day of January to the 31st day of December, inclusive. Said certificates may be issued at any time for and during the current year, and may be issued during the month of December for the year commencing on the first day of January thereafter.

6. It shall be the duty of the Director of the West Virginia Agricultural Experiment Station to make or cause to be made a chemical analysis of every sample of commercial fertilizer so furnished him, and he shall print the result of such analysis in the form of a label or tag. Such printed label or tag shall set forth the name of the manufacturer the place of manufacture, the brand of the fertilizer, and the essential ingredients contained in said fertilizer, expressed in terms and manner approved by the Director, together with a cert ficate from the Director, setting forth that said analysis is a true and complete analysis of the sample furnished him of such brand of fertilizer of the ingredients claimed to be contained therein. And he shall also place upon each label or tag the money value per ton of such fertilizer, computed from its composition as he may determine. The Director shall furnish such labels or tags in quantities of one hundred or multiple thereof, to any person or company complying with this act, and desiring to sell, offer or expose for sale, any commercial fertilizer in this State, and shall receive therefor the sum of fifty cents for every one hundred so delivered, and shall without delay pay the same to the Treasurer of the West Virginia Univeraity for the use of the Agricultural Experiment Station, and take duplicate receipts therefor, one of which he shall retain and the other he shall deliver to the Secretary of the Board of Regents, who shall file and preserve the same in his office.

7. The Board of Regents of the West Virginia University shall expend the money received under the provisions of this Act in meeting the legitimate expenses of the Station, in making analyses of fertilizers, in experimental tests of same, and in such other experimental work and purchases as shall inure to to the benefit of the farmers of this State, and shall include in their annual report a statement of the receipts and disbursements thereof.

8. The Director of said Experiment Station is hereby authorized in person or by deputy to take samples for analysis from any lot or from any commerical fertilizer which may be in the possession of any dealer in the State. And he is hereby

authorized to prescribe and enforce such rules and regulations as he may deem necessary to carry fully into effect the true intent and meaning of this Act; and any agriculturist, a purchaser of any commerical fertilizer in this State, may take a sample of the same under the rules and regulations of the Director of the said Experimental Station, or forward the same to the Experimental Station for analysis, and if the Director has reason to believe that the manufacture of, or dealer in, said fertilizer has made any false or fraudulent representation in regard to said fertilizer, he shall cause the said sample to be analyzed free of charge, and certify the same to the person forwarding the sample.

9. Said Director shall also publish, by bulletin, the brand name and location of the manufacturer, and chemical analysis of every fertilizer analyzed or caused to be analyzed by him. Said last publication to be made, if practicable, before the time at which said fertilizer is to be applied to the soil.

10. Any manufacturer or vendor of any chemical fertilizer who shall sell, or offer or expose for sale, any commercial fertilizer without having previously complied with the provisions of this Act herein before set forth, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined not less than fifty nor more than five hundred dollars.

11. Any company, firm or person who shall wilfully remove from or deface or change any label, or tag, or brand affixed to any package of fertilizer under the provisions of this act, before such fertilizer has been used for manurial purposes, or who shall sell such fertilizer without such label or tag being affixed thereto at the time of the sale, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined not less than ten nor more than fifty dollars for each offense.

12. Any company, firm or person who shall remove from or cause to be removed from any package of commercial fertilizer any statement, label or tag affixed thereto under the provisions of this Act, and affix or cause the same to be affixed to any other package of commercial fertilizer shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined not less than ten nor more than fifty dollars for each offense.

13. Any company, firm or person violating any of the provisions of this Act, or who fails to comply with the requirements of this Act, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall, when no other penalty is prescribed, be fined not less than ten nor more than one hundred dollars for each offense. But this act shall not be construed to apply to any one who manufactures fertilizers for his own use and not for sale.

14. The Director of said Experiment Station shall report to the prosecuting attorney of the county wherein the offense was committed, all violations of the provisions of this act, and failure to comply therewith, and a copy of any statement label or tag required to be filed with said Director, or prepared by him, and any analysis made or caused to be made by him, when duly certified by said Director, shall be received in evidence in any prosecution or a suit for any violation of the provision of this Act.

15. That chapter 25 of the Acts of the Legislature of West Virginia, passed on the 4th day of March, 1879, entitled "An act to protect the purchasers of fertilizers in this State," be and the same is hereby repealed.

VALUATIONS.

All valuations published by us, whether in the tables or on the tags, are *retail* valuations, or the prices at which we think farmers ought to be able to obtain the goods from the dealer. Valuations for 1897 will be calculated as follows:

FOR MIXED FERTILIZERS.

Available Phosphoric Acid	3½	cents per lb.
Insoluble Phosphoric Acid	2	" " "
Nitrogen	21	" " "
Potash	6	" " "

FOR BONES.

Total Phosphoric Acid	2½	cents per lb.
Nitrogen	12	" " "

ACID PHOSPHATES.

Available Phosphoric Acid	3½	cents per lb.
Insoluble Phosphoric Acid	2	" " "

Add $2.50 per ton freight.

Add 20 per cent. commission on money invested including freight.

We give the above scheme in full, so that in case farmers are better informed than we as to the value of materials, a fair commission to agents, or the freight to their particular shipping point, they can correct our valuations accordingly.

TABLE I.—ANALYSES OF OFFICIAL SAMPLES OF COMMERCIAL FERTILIZERS FOR 1895-6

NAME OF MANUFACTURER.	NAME OF BRAND.		Soluble Phosphoric Acid Guaranteed.	Soluble Phosphoric Acid in Official Sample.	Reverted Phosphoric Acide Guaranteed.	Reverted Phosphoric Acid in Official Sample.	Insoluble Phosphoric Acid Guaranteed.	Insoluble Phosphoric Acid in Official Sample.	Total Phosphoric Acid Guaranteed.	Total Phosphoric Acid in Official Sample.	Available Phosphoric Acid Guaranteed.	Available Phosphoric Acid in Official Sample.	Nitrogen Guaranteed.	Nitrogen in Official Sample.	Potash Guaranteed	Potash in Official Sample.	Valuation calculated from Guaranteed Analysis.	Valuation of Official Sample.
Allison & Addison, Richmond, Va.....	Acid Phosphate	'95	10.00	11.29	2.00	2.85	1.00	1.70	13.00	15.84	12.00	14.14	...	....	..	...	13.50	15.75
		'96		10.08	...	2.84	1.00	1.58	13.00	14.50	12.00	12.92	...	....	....	...	13.50	14.50
" "	Anchor Brand Tobacco Fert	'95	6.50	7.48	2.00	2.56	2.00	1.83	10.50	11.87	8.50	10.04	2.47	2.40	1.50	2.27	27.25	27.75
		'96	.....	7.16	..	2.61	1.00	1.89	9.50	11.66	8.50	9.77	2.26	2.40	2.00	2.00	25.00	27.00
" "	Star Brand Guano..	'95	6.00	8.07	2.00	2.16	1.00	2.16	9.00	12.39	8.00	10.23	1.26	2.11	1.25	1.38	18 25	25.25
		'96	....	5.75	..	3.74	1.00	2.73	9.00	11.82	8.00	9.09	1.65	1.80	1.25	1.90	20.25	23.75
Armour Fert. Works, Chicago, Ill.....	Ammoniated Bone and Potash.....	'95	1.00	2.74	6.00	6.76	3.00	3.02	10.00	12.52	7.00	9.50	2.00	2.89	1.00	1.65	22.75	29.25
		'96	4.00	4.35	2.00	6.06	2.00	2.20	8.00	12.61	6.00	10.41	2.47	3.20	1.50	2.00	23.50	31.75
" "	Bone and Blood	'95	.....	trace	5.00	8.90	4 00	5.75	9.00	14.65	5.00	8.90	5.76	5.91	....	..	38.25	43.00
		'96	....	trace	5.00	....	5.00	8.66	10.00	15.75	5.00	7.09	5.77	5.25	...	..	38.75	39.50
" "	Bone Meal.....	'95	.....	.....	....	...	....	....	25.00	26.61	.....	.....	2.50	2.88	.. ..	...	27.00	29.25
		'96	..	....	....	....	....	....	25.00	26 43	.....	....	2.47	2.75		...	27.00	28.75
" "	All Soluble	'95	1.00	1.86	7.00	6.63	3.00	4.42	11.00	12.91	8.00	8.49	2.87	3.00	4.00	6.73	31.50	37.00
		'96	2.00	2.60	6.00	6.37	2.00	4.30	10.00	13.27	8.00	8.97	2.67	3.20	4.00	4 75	34.00	35.50
Atlantic & Va. Fert. Co., Richmond, Va.	Eureka Acid Phosphate	'95	.....	11 47	....	3.55	....	1.20	?	16.22	10.00	15.02	....	...	..	...	11.50	16.25
		'96	....	.....	..	....	....	....	..	.....	.....	.....	....	....	....	....	.....	.....
" "	Eureka A'mo. Bone for Tobacco.....	'95	.....	8.50	...	2.08	....	1.65	?	12.23	9.00	10.58	2.06	2.09	2.00	2.45	23.75	26.75
		'96	.....	.....	....	....	.. ..	....	.....	.....	.....	.....	....	....	....	....	.....	.....
" "	Eureka Amm'dated Bone Superphos...	'95	...	7.23	..	2.29	....	1.53	?	11.65	8.00	10.12	1.65	1.45	2.00	2.88	21.00	23.75
		'96	.....	....	....	....	....	..	.....	.....	.....	.....	....	....	....	....	.....	.....
" "	Eureka Bone and Potash Compound	'95	.....	9.52	....	4.02	....	1.06	?	14.60	10.00	13.54	...	....	2.00	3.09	14.25	19.25
		'96	.....	10.21	....	2.47	...	0.33	.....	13.01	10.00	12.68	....	....	2.00	2.90	14.25	18.00
" "	Crenshaws Acid Phosphate	'95	.....	13.51	....	1.65	...	1.08	?	16.24	13.00	15.16	....	....	..	...	14.00	16.25
		'96	.....	10.15	. .	3.90	...	1.55	.....	15.60	13.00	14.05	...	....	....	..	14.00	15.50
" "	Richmond Special Mixture.....	'95	.....	7.82	....	2.32	...	1.70	?	11.84	?	10.14	?	1.58	?	5.14	.....	27.75
		'96	....	.....	....	....	.	....	. ...	.....	.....	.....	....	...	....	....	.....	.....
" "	Our Acid Phosphate	'95	.....	.....	....	....	. ..	....	.....	.....	.....	.....	....	...	...	....		
		'96	...	8.09	...	4.87	...	1.87	....	14.83	12.00	12.96	...	....	....	....	13.00	14.75

Baker, R. J. & Co., Baltimore, Md	Pure Diss. S. C. Phosphate	'95	12.00	10.60	2.00	3.74	2.00	1.61	16.00	15.95	14.00	14.34	...	...	...	...	15.75	15.50
		'96	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Baltimore Guano Co., Baltimore, Md	B. G. Amm'd Bone Phosphate	'95	6.00	4.95	2.00	4.01	2.00	1.60	10.00	10.56	8.00	8.96	1.23	1.46	2.00	1.91	19.75	20.50
		'96	6.00	5.83	2.00	1.23	1.00	2.05	9.00	10.11	8.00	7.06	1.25	1.82	2.00	2.64	19.50	23.00
" "	Defiance Bone	'95	8.00	8.47	3.00	3.05	2.00	1.67	13.00	13.19	11.00	11.52	...	...	2.00	3.24	16.00	18.00
		'96	8.00	7.62	3.00	3.71	1.00	1.30	12.00	12.63	11.00	11.33	...	...	2.00	2.64	16.00	17.00
" "	Diss. Bone Phos.	'95	8.00	9.84	5.00	3.49	2.00	2.69	15.00	16.02	13.00	13.33	...	...	...	...	15.00	15.50
		'96	10.00	9.48	3.00	4.18	1.00	1.30	11.00	14.96	13.00	13.66	...	...	...	...	14.50	15.00
" "	Game Guano	'95	7.00	7.84	2.00	2.31	1.00	1.73	10.00	11.88	9.00	10.15	2.11	2.93	2.50	2.53	25.25	30.75
		'96	6.00	6.41	3.00	2.37	1.00	2.12	10.00	19.90	9.00	8.78	2.00	2.58	2.50	3.12	24.75	29.00
Baltimore Pulverizi'g Co., Baltimore, Md.	Farmer's Favorite Fertilizer	'95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		'96	...	2.65	...	2.48	...	2.05	?	7.18	4.25	5.13	0.83	1.30	1.75	2.10	13.25	18.00
Baugh & Sons Co., Baltimore, Md	Double Eagle Phosphate	'95	...	5.78	...	2.37	3.00	4.94	11.00	13.09	8.00	8.15	2.05	2.05	0.50	1.49	22.25	24.75
		'96	...	5.82	...	2.53	2.50	3.06	10.50	11.41	8.00	8.35	2.50	2.60	0.50	1.11	24.25	26.25
" "	Export Bone with Potash	'95	...	...	...	...	...	...	11.00	12.39	...	...	1.64	2.42	2.00	2.82	18.50	23.25
		'96	...	...	...	...	...	...	11.00	12.41	...	...	1.75	2.45	2.00	2.75	18.75	23.25
" "	General Crop Grower	'95	...	8.00	...	2.39	...	1.34	?	11.73	8.00	10.39	0.82	1.03	1.00	2.25	15.29	20.75
		'96	...	5.30	...	3.40	2.00	1.59	9.00	10.59	8.00	9.00	1.00	0.84	1.00	0.80	16.25	16.75
" "	Pure Diss. Animal Bone	'95	...	1.94	...	11.30	4.00	4.12	14.00	17.36	10.00	13.24	2.46	3.40	...	...	25.75	33.25
		'96	...	2.24	...	15.08	5.00	2.40	16.00	19.32	11.00	17.32	2.50	3.24	...	...	27.25	34.75
" "	High Grade Acid Phosphate	'95	...	12.67	...	2.37	1.00	0.89	15.00	15.93	14.00	15.04	...	...	...	...	15.25	16.00
		'96	...	12.65	...	2.31	1.00	0.88	15.00	15.84	14.00	14.96	...	...	...	...	15.25	16.00
" "	Pure Raw Bone Meal	'95	...	...	...	...	...	...	21.50	22.86	...	...	3.28	4.05	...	...	27.75	31.25
		'96	...	...	...	...	...	...	21.50	22.34	...	...	3.50	4.16	...	...	28.50	31.50
" "	Soluble Alkaline Superphos	'95	...	10.51	...	3.15	...	0.63	?	14.29	10.00	13.60	...	...	2.00	4.23	14.25	20.75
		'96	...	8.98	...	2.31	2.00	0.66	12.00	11.95	10.00	11.29	...	...	2.00	2.91	15.25	17.00
Boal, Wm. M., Ronceverte, W. Va.	Ground Animal Bone	'95	...	...	...	...	...	...	?	23.07	...	...	?	3.97	...	...	?	31.00
		'99	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bowker Fert. Co., Boston, Mass.	Acid Phosphate	'95	9.00	12.05	2.00	1.53	2.00	2.95	13.00	16.53	11.00	13.56	...	...	...	...	13.25	15.75
		'96	9.00	8.12	2.00	4.11	2.00	2.98	13.00	15.21	11.00	12.23	...	...	...	...	13.25	14.75
" "	Fresh Ground Bone	'95	...	...	...	...	...	...	18.00	26.24	...	...	2.50	2.78	...	...	22.75	28.75
		'96	...	...	...	...	...	...	18.00	21.41	...	...	2.50	2.92	...	...	22.75	26.25
" "	Superphosphate with Potash	'95	9.00	11.11	1.00	1.35	2.00	2.84	12.00	15.30	10.00	12.46	...	...	1.00	3.32	13.75	19.50
		'96	9.00	7.17	1.00	3.95	1.00	2.88	11.00	14.00	10.00	11.42	...	...	1.00	1.75	13.25	16.25
" "	Sure Crop Phosphate	'95	6.00	5.79	2.00	4.51	2.00	2.82	10.00	13.12	8.00	10.30	0.82	1.06	1.00	1.38	16.25	20.25
		'96	6.00	4.50	2.00	4.88	2.00	3.80	10.00	13.18	8.00	9.38	0.75	1.30	1.00	2.00	16.00	22.25
" "	Market Bone	'95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		'96	...	...	...	...	...	...	16.00	18.35	...	...	1.50	3.05	...	...	18.00	25.00
Bradley Fert. Co., Boston, Mass.	Diss. Bone, Justice Brand	'95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		'96	10.00	8.00	2.00	6.21	1.00	1.05	13.00	15.26	12.00	14.21	...	...	...	...	13.50	15.50
" "	Diss. Bone with Potash	'95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		'99	5.00	5.58	3.00	3.13	2.00	1.70	10.00	10.41	8.00	8.71	0.82	1.13	2.15	3.02	18.00	21.25
" "	Niagra Phosphate	'95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		'96	5.00	5.81	2.00	3.47	1.00	1.05	8.00	10.36	7.00	9.31	0.82	1.09	1.08	2.85	15.00	21.00
" "	B. D. Sea Fowl Guano	'95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		'96	5.00	5.90	3.00	1.07	2.00	2.25	10.00	12.22	8.00	9.07	2.06	2.38	1.50	2.47	23.25	28.00
" "	Abattoir Bone Dust	'95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		'96	...	...	...	...	...	...	14.00	18.61	...	...	1.65	2.85	...	...	17.25	21.50

TABLE I.—ANALYSES OF OFFICIAL SAMPLES OF COMMERCIAL FERTILIZERS FOR 1895-6.—Continued.

NAME OF MANUFACTURER.	NAME OF BRAND.		Soluble Phosphoric Acid Guaranteed.	Soluble Phosphoric Acid in Official Sample.	Reverted Phosphoric Acid Guaranteed.	Reverted Phosphoric Acid in Official Sample.	Insoluble Phosphoric Acid Guaranteed.	Insoluble Phosphoric Acid in Official Sample.	Total Phosphoric Acid Guaranteed.	Total Phosphoric Acid in Official Sample.	Available Phosphoric Acid Guaranteed.	Available Phosphoric Acid in Official Sample.	Nitrogen Guaranteed.	Nitrogen in Official Sample.	Potash Guaranteed.	Potash in Official Sample.	Valuation calculated from Guaranteed Analysis.	Valuation of Official Sample.
Bradley Fertilizer Co. Boston Mass.	Pure Ground Bone	'95	.....	.....	..	..	....	..	.....	.....	.....	.....			..			
		'96	....	....	..	..	..	..	21.00	22.30	.....	....	2.50	3.42	...		24.50	28.75
" "	Acid Phosphate	'95	.....	.....	..	..	....	..	.....	.....	.....	.....	...	....	...	....	.....	.....
		'96	7.00	8.55	3.00	5.52	2.00	1.03	12.00	15.10	10.00	14.07	..	.	.	....	12.50	15.25
Chemical Co. of Canton, Baltimore, Md.	Bakers' Special W. C. & G. Mixture	'95	6.00	5.29	3.00	4.54	1.00	1.76	10.00	11.59	9.00	9.83	0.82	1.17	2.00	2.22	18.00	21.25
		'96	6.00	8.00	3.00	2.11	1.00	0.85	10.00	11.56	9.00	10.71	0.82	1.28	2.00	3.35	18.00	23.75
" "	Gem Phosphate	'95	9.00	10.86	4.00	3.68	2.00	1.40	15.00	15.94	13.00	14.54	....	....	....	..	15.00	16.00
		'96	.....	.....	....	....	....	....	.....	.....	.....	.....					.....	.....
" "	Potato Manure	'95	5.00	7.31	2.00	3.05	2.00	1.28	10.00	11.64	8.00	10.36	0.82	1.37	4.50	3.69	21.25	24.50
		'96	.....	.....	....	....	....	....	.....	.....	.....	.....	..	....	....	....	.....	.....
" "	Pure Diss. S C. Bone	'95	9.00	10.94	4.00	3.14	2.00	1.61	15.00	15.69	13.00	14.05	..	....	..	....	15.00	15.50
		'96	10.00	11.56	4.00	4.87	1.00	0.90	15.00	17.13	14.00	16.23	...	....			15.25	17.00
" "	Soluble Bone and Potash	'95	7.00	5.61	3.00	4.49	1.00	1.67	11.00	11.77	10.00	10.10	...	....	2.00	2.60	14.25	16.00
		'96	7.00	6.12	3.00	6.19	1.00	1.42	11.00	13.73	10.00	12.31	....	..	2.00	4.25	14.25	20.25
" "	Virginia High Grade	'95	5.00	4.18	3.00	2.89	2.00	1.33	10.00	8.49	8.00	7.07	2.00	2.52	1.50	2.15	23.00	25.25
		'96	.....	.....	....	....	....	....	.....	.....	.....	.....	..	....	....	....	.....	.....
" "	Red Clover	'95	.....	.....	....	....	....	....	.....	.....	.....	.....	..	....	....	....	.....	.....
		'96	4.00	2.50	1.00	4.78	1.00	0.82	6.00	8.10	5.00	7.28	0.82	1.28	2.00	4.30	14.75	22.35
Chesapeake Guano Co., Baltimore, Md.	Diss. Bone Phosphate	'95	.....	....	...	...	....	0.69	?	15.58	14.00	14.89	...	....	....	..	14.75	15.75
		'96	....	....	..	....	....	....	.....	.....	.....	.....			....	....	.....	.....
Cincinnati Desicating Co., Cincinnati, Ohio.	Acidulated Bone	'95	.....	3.50	....	2.81	7.00	2.54	19.00	19.75	12.00	16.31	3.70	4.16	...	.	35.00	39.25
		'96	.....	.....	....	....	....	..	.....	.....	..	.....	..	....	....		.....	.....
" "	Fine Ground Bone	'95	.....	.....	....	.	....	...	20.00	21.14		.....	3.33	3.33	....	...	27.00	27.75
		'96	.....	.....	....	....	....	....	.....	.....	.....	.....	....	....	....		.....	.....
" "	Gilead	'95	.....	4.60	....	1.63	3.00	5.44	12.00	11.67	9.00	6.23	2.50	3.07	2.00	2.36	27.50	30.00
		'96	.....	.....	..	....	....	....	.....	.....	.....	.....	....		....	....	.....	.....
" "	Gold and Silver	'95	.....	10.13	....	3.03	..	0.55	12.00	13.71	12.00	13.16	....	..	....		13.00	14.25
		'96	.....	.....	...	....	....	....	.....	.....	.....	.....	....	....	....		.....	.....

Cincinnati De'sicating Co., Cincinnati, Ohio.	Ohio Valley	'95	....	0.99	..	6.09	3.00	4.17	11.00	11.25	8.00	7.08	1.65	2.34	2.00	1.77	22.36	25.25
		'96	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
" "	Phoenix	'95	....	1.29		4.95	2.00	5.08	10.00	11.32	8.00	6.24	1.65	2.21	1.00	1.00	20.70	23.25
		'96	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
" "	Tobacco and Potato	'95	....	3.93	....	6.16	2.00	2.63	11.00	12.72	9.00	10.09	3.33	4.49	5.00	5.28	35.50	42.50
		'96	....	....	..	....	....	....	....	....	....	....	....	....	....	....	....	....
Cleveland Dryer Co. Cleveland, Ohio	Buckeye Amm'd Bone Superphos.	'95	....	6.69	..	4.77	2.00	1.91	11.00	13.36	9.00	11.46	2.46	3.07	1.00	0.17	25.50	29.25
		'96	....	7.37	..	3.14	2.00	2.79	11.00	13.30	9.00	11.51	2.47	3.29	1.00	1.01	25.50	31.25
" "	Ohio Seed Maker	'95	....	7.11	..	6.01	5.00	1.12	15.00	15.24	10.00	13.12	1.23	1.25	..	..	20.00	21.25
		'96	..	6.74	....	3.98	5.00	3.29	15.00	14.01	10.00	10.72	1.24	1.93	..	..	20.00	23.25
" "	Potato & Vegetable	'95	....	7.17	..	3.40	2.00	1.78	10.00	12.35	8.00	10.57	3.28	3.38	4.00	1.71	33.00	36.50
		'96	..	5.90		5.35	2.00	1.67	10.00	12.92	8.00	11.25	3.30	3.91	4.00	5.07	33.00	40.25
" "	Phospho Bone	'95	....	7.33		4.98	...	3.31	?	15.60	10.00	12.31	0.65	0.98	1.00	1.24	16.00	21.75
		'96	..	6.98	....	3.45	..	1.77	....	12.20	10.00	10.43	0.62	1.20	1.00	1.86	16.00	21.25
" "	Square Bone	'95	....	4.31	...	8.46	14.00	7.77	20.00	20.54	6.00	12.77	2.46	3.01	..		27.25	32.50
		'96	....	2.39	..	8.67	..	10.84	22.00	21.90	6.00	11.06	2.06	2.78	..		22.50	31.50
" "	Superior Bone Meal	'95	....	....	....	....	..		22.00	23.31	..	..	3.71	1.34		..	20.50	32.50
		'96	....	....	....	....	..	....	22.00	24.46	....	....	3.30	4.23			28.00	33.00
" "	XXX Phosphate	'95	....	8.97		3.69	2.00	4.61	15.00	17.27	13.00	12.62		.	..	..	15.00	15.75
		'96	....	5.83	.	8.31	2.00	1.56	15.00	15.70	13.00	14.14					15.00	15.75
" "	Horsehead Superphosphate	'96	....	0.71	....	10.21	2.00	1.32	11.00	12.24	9.00	10.92	....	....		.	11.50	12.75
Crocker F. & Chemical Co., Buffalo, N.Y.	General Crop Phosphate	'95	5.00	2.48	2.00	5.00	1.00	2.39	8.00	9.87	7.00	7.48	0.82	1.03	1.08	1.15	15.00	17.75
		'96	5.00	2.68	2.00	4.07	1.00	2.89	8.00	10.24	7.00	7.25	0.82	1.07	1.08	1.67	15.00	18.25
" "	New Rival Amm'd Superphosphate	'95	8.00	7.17	2.00	3.50	1.00	2.01	11.00	12.68	10.00	10.67	1.50	1.34	1.60	2.10	20.25	22.75
		'96	7.00	7.69	3.00	2.72	1.00	2.10	11.00	12.51	10.00	10.41	1.20	1.28	1.60	2.63	20.25	23.00
" "	Universal Grain Grower	'95	5.00	1.36	2.00	3.12	1.00	0.87	8.00	8.45	7.00	7.58	0.82	1.05	2.70	3.11	17.50	19.50
		'96	5.00	1.22	2.00	3.42	1.00	1.07	8.00	8.72	7.00	7.65	0.82	1.15	2.70	3.26	17.50	20.50
" "	Amm'd Wheat and Corn Phos	'95	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		'96	7.00	7.99	3.00	2.36	1.00	0.94	11.00	11.29	10.00	10.35	2.00	2.07	1.60	2.27	24.27	25.75
" "	Dyer & Switt'r's Corn, Wheat & Oats Fert.	'95	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		'96	5.00	5.92	2.00	2.18	1.00	2.34	8.00	10.11	7.00	8.10	0.82	1.17	1.60	2.00	15.75	19.75
" "	Potato, Hop & Tobacco Fert.	'95	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		'96	7.00	7.34	3.00	3.02	1.00	1.12	11.00	11.48	10.00	10.36	2.00	1.90	3.25	3.93	26.75	27.50
" "	Corn, Wheat & Potato Fert.	'95	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		'96	6.00	7.04	2.00	1.52	1.00	2.32	9.00	10.90	8.00	8.55	1.03	1.55	1.60	2.[illegible]	17.75	22.50
" "	Niagara Phosphate	'95	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		'96	7.00	8.91	4.50	3.79	1.60	4.26	12.50	16.93	11.50	12.70		.		.	13.25	15.75
" "	J. Cris Thomas' General Fert	'95	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		'96	5.00	6.15	2.00	2.32	1.00	2.37	8.00	10.81	7.00	8.47	0.82	1.10	1.60	2.02	15.75	19.75
" "	J. Cris Thomas' New Arrival	'95	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		'96	5.00	7.68	3.00	1.75	1.00	1.62	9.00	11.05	8.00	9.43	2.05	2.01	1.60	1.86	23.00	21.75
" "	Browns Wheat and Corn Fert.	'95	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		'95	5.00	7.75	3.00	1.70	1.00	1.95	9.00	11.40	8.00	9.45	1.23	1.31	1.60	1.95	18.75	21.50
" "	Special Potato Manure	'96	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		'96	3.50	6.24	4.50	2.33	1.00	1.19	9.00	9.76	8.00	8.57	3.70	3.65	5.40	6.05	36.75	37.75
" "	Ground Bone Meal	'95	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		'96	....	....	.	....	....	....	25.00	27.40	....	....	2.00	2.67	....	.	25.25	29.00

TABLE I.—ANALYSES OF OFFICIAL SAMPLES OF COMMERICAL FERTILIZERS FOR 1895-6 —Continued.

NAME OF MANUFACTURER.	NAME OF BRAND.		Soluble Phosphoric Acid Guaranteed.	Soluble Phosphoric Acid in Official Sample.	Reverted Phosphoric Acid Guaranteed.	Reverted Phosphoric Acid in Official Sample.	Insoluble Phosphoric Acid Guaranteed.	Insoluble Phosphoric Acid in Official Sample.	Total Phosphoric Acid Guaranteed.	Total Phosphoric Acid in Official Sample.	Available Phosphoric Acid Guaranteed.	Available Phosphoric Acid in Official Sample.	Nitrogen Guaranteed.	Nitrogen in Official Sample.	Potash Guaranteed.	Potash in Official Sample.	Valuation calculated from Guaranteed Analysis.	Valuation of Official Sample.
Currie Fertilizer Co. Louisville, Ky.	Kentucky Phosphate	'95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		'96	8.00	7.70	1.25	1.84	1.00	1.40	10.00	10.94	9.00	9.54	4.00	0.70	1.50	1.52	15.25	17.50
Detrick Fert & Chemical, Baltimore, Md.	Corn Fertilizer	'95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		'96	8.00	7.79	2.00	2.22	1.00	1.54	11.00	11.55	10.00	10.01	0.80	1.00	2.00	2.40	19.00	20.75
" "	Ammoniated Bone Phosphate	'95	6.00	7.32	3.00	4.40	2.00	3.04	11.00	14.76	9.00	11.72	1.25	1.36	1.00	1.19	19.25	22.75
		'96	6.00	7.85	3.00	2.70	2.00	2.75	11.00	13.30	9.00	10.55	1.23	1.31	1.00	1.64	19.25	22.25
" "	Diss. S. C. Bone	'95	11.00	12.31	3.00	3.32	1.00	0.71	15.00	16.34	14.00	15.63	...	..	...	..	15.75	16.50
		'96	11.00	13.58	3.00	2.11	2.00	0.57	16.00	16.26	14.00	15.69	...	...	...	...	15.75	16.50
" "	Pure Fine Ground Bone	'95	...	...	...	...	...	...	20.00	21.35	...	...	3.30	3.75	...	...	27.00	29.25
		'96	...	...	...	...	...	..	21.00	23.03	...	...	3.30	3.35	...	...	27.50	29.00
" "	Soluble Bone Phos. and Potash	'95	8.00	10.18	2.00	3.22	2.00	1.06	12.00	14.46	10.00	13.40	..	...	2.00	1.88	16.25	17.50
		'96	7.00	9.92	3.00	2.64	2.00	0.87	12.00	13.43	10.00	12.56	...	..	2.00	2.72	15.25	18.00
" "	Wheat Fertilizer	'95	8.00	9.04	2.00	3.58	2.00	2.39	12.00	15.01	10.00	12.62	1.00	1.09	...	...	17.50	20.25
		'96	7.00	8.55	3.00	2.21	2.00	2.30	12.00	13.06	10.00	10.76	1.02	1.27	...	...	17.50	19.50
" "	Vegetator Ammd. Bone Superphos.	'95	7.00	9.34	3.00	3.41	2.00	2.57	12.00	15.32	10.00	12.75	2.00	2.03	1.50	1.97	25.00	28.00
		'96	7.00	8.64	3.00	2.49	2.00	4.14	12.00	15.27	10.00	11.13	2.06	2.13	1.50	1.92	25.00	27.75
" "	Imperial Compound	'95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		'96	7.00	7.85	2.00	2.27	1.50	2.16	10.50	12.28	9.00	10.12	0.83	1.07	1.00	1.92	16.75	20.75
Detrick, Louis F. Baltimore, Md.	Orchlla Guano	'95	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...
		'96	...	trace	...	5.20	...	10.00	...	15.21	14.00	5.21	...	...	...	...	14.75	12.25
" "	XX Fra Acid Phos.	'95	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...
		'96	11.00	13.06	3.00	2.25	1.00	0.22	15.00	15.33	14.00	15.31	...	...	...	...	15.25	16.00
" "	K. K. K. Kangaroo Komplete Kompo'd	'95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		'96	6.00	2.86	2.00	4.75	3.50	3.74	11.50	11.35	8.00	7.61	1.65	1.90	3.00	3.63	24.00	27.25
" "	Sockless & Shoeless	'95	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...
		'96	6.00	2.09	2.00	5.33	2.00	4.58	10.00	12.00	8.00	7.42	1.03	1.31	1.25	1.84	17.75	20.75
" "	Bone and Potash Mixture	'95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		'96	8.00	8.53	2.00	2.40	2.50	1.18	12.50	12.11	10.00	10.93	...	..	2.25	2.49	15.75	16.25

Dunan P. Q., Baltimore, Md	Ruth's Goodluck Fertilizer	'95																
		'96		6.60	3.00	3.20	3.00	1.78	12.00	11.58	9.00	9.80	2.50	2.10	2.00	2.00	27.50	25.50
" "	Corn and Oats	'95																
		'96	5.00	7.22	1.00	2.48	1.00	2.21	9.00	11.90	8.00	9.70	2.00	2.08	2.00	2.00	23.25	25.50
" "	Diss. Bone Phos	'95		11.89		3.00		0.69		15.58	14.00	14.89					14.75	15.75
		'96	11.00	9.68	2.00	5.12	2.00	0.21	16.00	15.01	14.00	14.80					15.75	15.50
Durham Fertilizer Co. Durham, N. C	High Grade Acid Phos	'95	7.00	11.37	3.00	3.54	1.00	1.19	11.00	16.00	10.00	14.91					12.00	16.00
		'96																
Eureka Fertilizer Co., Perryville, Md	King's S. C. Bone	'95		11.22		2.56	2.00	2.47	15.00	16.25	13.00	13.78					15.00	17.75
		'96		12.38		2.83	1.00	2.44	15.00	17.65	14.00	15.21					15.75	17.00
Great East'rn Fert Co. " Ruthland, Vt	Corn Fertilizer	'95	6.00	1.73	2.00	9.25	1.00	1.68	9.00	12.66	8.00	10.98	0.82	0.99	4.00	3.71	20.00	23.50
		'96	6.00	5.50	2.00	3.42		1.48		10.40	8.00	8.92	0.82	1.62	4.00	4.30	19.50	22.50
" "	English Wheat Grower	'95	6.00	0.42	2.00	8.52	1.00	2.70	9.00	11.64	8.00	8.94	0.82	1.43	2.00	2.25	17.25	22.25
		'96	6.00	7.46	2.00	4.11		1.73		13.30	8.00	11.57	0.82	1.06	2.00	2.53	16.75	22.50
" "	Garden Special	'95		5.41		2.84		1.25	?	9.50	6.00	8.25	3.28	3.45	8.00	8.16	36.00	39.75
		'96																
" "	Soluble Bone and Potash	'95		6.42		5.81		1.62	?	13.85	11.00	12.23			2.00	1.75	15.00	16.50
		'96		8.89		2.60		0.58	?	12.07	11.00	11.49			2.00	2.50	15.25	16.50
" "	Diss. Bone	'95		6.29		4.62		4.49	?	15.45	13.00	10.83					14.00	14.25
		'96		12.31		1.04		1.39		14.74	13.00	13.35					14.00	15.00
" "	Vegetable, Vine & Tobacco	'95	6.00	2.99	2.00	8.00	1.00	1.19	9.00	12.18	8.00	10.99	2.50	2.74	3.25	3.46	27.50	31.50
		'96	6.00	5.64	2.00	2.82		1.34		9.80	8.00	8.46	2.05	2.22	3.25	3.85	24.75	27.75
" "	Wheat Special	'95	6.00	7.89	2.00	1.77	1.00	1.07	9.00	11.73	8.00	10.66	1.64	2.04	2.00	2.57	21.25	26.50
		'96	6.00	6.71	2.00	2.17		1.56		10.44	8.00	8.88	1.64	1.73	2.00	2.52	21.00	23.50
" "	Pure Bone	'95																
		'96							22.00	20.10			1.64	3.90			22.00	20.00
Hess, S. M. & Bro., Philadelphia, Pa.	Keystone Bone Phosphate	'95	6.00	6.22	2.00	6.65	1.00	0.87	9.00	12.77	8.00	12.90	0.82	1.57	1.00	1.51	15.75	24.25
		'96	7.00	6.67	2.00	3.26	2.00	2.81	11.00	12.74	9.00	9.93	0.83	1.62	1.00	2.88	17.00	25.00
" "	Emperor Phosphate	'95	8.00	6.19	2.00	5.38	1.00	1.81	11.00	13.38	10.00	11.57			1.00	1.88	13.25	16.25
		'96	8.00	9.21	2.00	3.84	1.00	1.74	11.00	14.79	10.00	13.05			1.00	3.06	13.25	19.25
" "	Soluble Bone	'95																
		'96	11.00	11.95	3.00	3.38	0.00	0.53	14.00	15.86	11.00	15.33					14.75	16.25
Hubbard & Co., Baltimore, Md	Soluble Bone and Potash	'95																
		'96		7.79		4.02		1.02		12.83	10.00	11.81				3.35	14.25	18.25
" "	High Grade S. C. Phosphate	'95																
		'96		12.38		2.59		1.63		16.60	14.00	14.97					14.75	16.75
Jarecki Chemical Co. Sandusky, Ohio	Lake Erie Fish Guano	'95		3.84		7.29	1.50	2.73	11.50	13.86	10.00	11.13	1.65	1.54	1.00	2.04	22.00	21.25
		'96																
" "	Pure Ground Bone	'95							25.00	27.67			2.87	2.53			28.25	28.75
		'96																
Kaufmann & Sons	Celebrated Potash Fert	'95	1.29			1.51		0.45	?	1.96	1.29	1.51			4.04	1.10	10.00	6.00
		'96																
Lechlider Bros. Hagerstown, Md	S. C. Bone	'95	0.50	1.00	5.50	4.79	0.50	0.89	6.00	6.68	5.50	5.79					7.75	8.25
		'96																
Liopitt, W. F., Charles Town, W. Va.	Special Amm'd Bone Phos	'95		4.45		3.41	1.00	3.96	9.00	11.82	9.00	7.86	1.60	1.13	1.50	2.19	20.50	20.25
		'96		6.75		2.28	0.50	3.33	8.00	10.36	7.50	9.03	1.03	1.36	1.50	2.63	17.00	21.75
Lister's Agr. Chem. Works, Newark, N. J	Crescent Bone Dust	'95							11.00	14.42			2.59	2.82			17.75	21.75
		'96							11.00	16.38			2.26	2.66			17.75	22.50

TABLE I.—ANALYSES OF OFFICIAL SAMPLES OF COMMERCIAL FERTILIZERS FOR 1895-6.—Continued.

NAME OF MANUFACTURER.	NAME OF BRAND.		Soluble Phosphoric Acid Guaranteed.	Soluble Phosphoric Acid in Official Sample.	Reverted Phosphoric Acid Guaranteed.	Reverted Phosphoric Acid in Official Sample.	Insoluble Phosphoric Acid Guaranteed.	Insoluble Phosphoric Acid in Official Sample.	Total Phosphoric Acid Guaranteed.	Total Phosphoric Acid in Official Sample.	Available Phosphoric Acid Guaranteed.	Available Phosphoric Acid in Official Sample.	Nitrogen Guaranteed.	Nitrogen in Official Sample.	Potash Guaranteed.	Potash in Official Sample.	Valuation calculated from Guaranteed Analysis.	Valuation of Official Sample.
Lister's Agr. Chem. Works, Newark, N. J.	Harvest Queen	'95	.....	8.30	.....	1.47	....	2.51	9.50	12.29	9.50	9.78	1.50	1.89	2.00	2.43	21.50	26,25
		'96	7.00	8.57	2.50	1.65	2.00	2.19	11.50	12.41	9.50	10.22	1.24	1.62	2.00	2.50	21.00	24.50
" "	Standard Superphos	'95	.....	9.39	....	1.86	....	2.55	10.00	13.73	10.00	11.15	2.85	2.30	1.50	2.12	28.00	28.25
		'96	.....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" "	U. S. Phosphate	'95	....	6.22	....	2.81	.....	1.57	7.00	10.60	7.00	9.03	1.60	1.68	2.00	2.64	20.00	23.50
		'96	.....	.....	...	...	....	....	.....	.....	.....	.....	....	...	....	....	.....	.....
" "	Animal Bone and Potash	'95	.....	.....	....	....	....	....	.....	.....	.....	.....	....	....	....	....	.....	.....
		'96	7.50	7.47	1.50	2.18	2.00	0.48	11.00	10.13	9.00	9.65	....	....	5.00	5.68	18.75	19.50
" "	Special Potato Fertilizer	'95	.....	.....	....	....	....	....	.....	.....	.....	.....	....	....	....	....	.....	.....
		'96	6.00	7.48	2.00	2.18	1.00	2.20	9.00	11.86	8.00	9.66	1.65	1.57	3.00	4.15	22.75	25.75
" "	Raw Bone Meal	'95	.....	.....	....	...	....	....	.....	.....	.....	.....	....	...	....	....	.....	.....
		'96	.....		..	....	....	....	23.00	22.62	....	....	2.68	2.90	....	....	26.50	27.00
Loudenbach Fert. Co. Urbana, Ohio.	Urbana Prize Potato & Tobacco Grower	'95	.....	8.08	....	1.90	2.00	2.70	12.00	12.68	10.00	9.98	2.08	2.24	6.00	6.55	31.50	33.50
		'96	.....	.....	....	....	....	....	.....	.....	.....	.....	....	....	....	....	.....	.....
" "	Urbana Superphos and Potash	'95	.....	3 00	.....	6.79	2.00	2.95	11.00	12.78	9.00	9.79	1.64	1.65	2.50	3.29	23.38	25.75
		'96	.....	.....	....	....	....	....	.....	.....	.....	.....	....	....	....	....	.....	.....
Maryland Fert. & Mfg. Baltimore, Md.	Ammoniated Bone	'95	6.00	5.56	3.00	3.15	1.00	3.49	10.00	12.20	9.00	8.71	1.85	2.10	1.50	1.70	22.50	25.00
		'96	6.00	6.31	3.00	2.83	1.00	3.71	10.00	12.85	9.00	9.14	1.85	1.99	1.50	2.10	22.50	25.50
" "	Diss. Phosphate	'95	9.00	10.47	4.00	3.75	1.00	0.93	14 00	15.15	13.00	14.22	...	....	....	....	14.50	15.50
		'96	10.00	11.73	4.50	3.63	1.00	1.09	15.50	16.45	14.50	15.36	...	....	...	....	15.75	15.75
" "	Diss. S C. Bone	'95	9.00	11.35	4.00	3.24	1.00	0.98	14.00	15.57	13.00	14.59	....	. ..	....	....	14.50	15.75
		'96	9.00	11.10	5.00	2.71	0.50	1.09	14.40	14.90	14.00	13.81	....	....	....	....	15.00	15.00
" "	Globe Complete Manure	'95	6.00	7.50	3.00	1.98	1.00	2.24	10.00	11.72	9.00	9.48	1.44	2.01	1.50	1.99	22.00	25.00
		'96	6.00	4.99	3.00	2.27	1.00	4.62	10.00	11.18	9.00	7.26	1.65	1.87	1.50	2.21	21.50	24.00
" "	Linden Superphaphat	'95	7.00	8.52	3.00	2.82	1.00	1.86	11.00	13.20	10.00	11.34	....	.	2.00	2.21	14.75	16.50
		'96	7.00	7.29	4.00	3.55	1.00	1.46	12.00	12.30	11.00	10.84	....	...	2.50	2.41	16.25	16.25
" "	Pure Fine Ground Animal Bone	'95	.....	.....	....	....	....	....	21.00	24 19	.....	.....	2.47	4.07	...	....	24.50	32.25
		'96	.....	.....	...	....	....	....	.....	.....	.....	.....	....	...	....	...	.....	.....

Maryland Fert. & Mfg. Co., Baltimore, Md.	Tornado Fertilizer.	'95	7.25	10.00	3.75	2.78	1.00	1.11	12.00	12.92	11.00	12.78	0.11	0.52	3.25	3.31	19.50	21.75
		'96	7.25	9.07	3.75	2.77	1.00	1.06	12.00	12.88	11.00	11.82	0.11	0.68	3.25	3.71	19.50	22.25
Monumental Chem. Co., Baltimore, Md.	Monumental Acid Phos	'95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		'96	12.00	7.87	2.00	4.10	1.00	2.91	15.10	17.18	14.00	12.27	....	..	....	...	15.25	14.70
" "	Wm. Penn Crop Grower	'95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		'96	6.00	5.97	2.00	2.71	1.00	2.70	9.00	11.38	8.00	8.68	0.81	1.14	1.00	1.59	15.75	19.50
Mt. Airy Mfg. Co., Baltimore, Md	Piedmont Diss. Bone Phos. Potash Goods	'95	...	6.64	..	3.68	0.50	1.48	11.00	11.00	10.50	10.32	....	...	1.00	1.02	13.30	13.75
		'96	8.50	5.44	2.00	7.48	1.00	0.90	11.50	12.92	10.50	12.02	...	...	1.00	1.33	13.75	15.50
" "	Piedmont Potato Producer	'95	...	5.14	....	1.49	2.00	1.04	7.00	7.65	5.00	6.69	2.46	2.09	6.00	6.91	29.25	29.50
		'96	4.00	4.30	1.00	3.92	2.00	1.10	7.00	8.12	5.00	7.22	2.50	2.44	6.00	6.75	29.5	31.50
" "	Piedmont Pure Raw Bone Mixture	'95	...	3.99	...	2.68	4.00	1.48	11.0	8.17	7.00	6.67	0.82	0.84	1.00	1.74	16.50	16.00
		'96	6.00	4.47	1.00	4.22	4.00	2.86	11.00	10.55	7.00	8.69	0.83	1.12	1.00	1.82	16.50	20.00
" "	Piedmont Royal Amd. Bone & Potash	'95	.....	2.85	..	3.48	1.00	1.15	7.00	7.48	6.00	6.32	1.07	0.89	3.00	3.25	18.25	18.00
		'96	5.00	3.57	1.00	1.82	1.00	2.35	7.00	7.74	6.00	5.39	1.08	1.05	3.00	3.62	18.25	19.25
" "	Piedmont High Grade S. C. Bone	'95	...	11.88	..	1.61	...	1.21	...	14.69	14.00	13.48	..	....	...	....	14.75	15.00
		'96	11.00	11.05	3.00	2.25	2.00	1.18	16.00	15.69	14.00	14.31	..	..	..	...	15.75	15.75
Newburg Fertilizer Co., Cleveland, Ohio	Acme Bone	'95	2.50	3.58	6.50	4.41	9.00	14.10	18.00	20.09	9.00	7.99	2.50	2.10	..	...	22.75	24.00
		'96	....	5.86	..	6.34	9.00	8.75	18.00	20.34	9.00	12.19	2.50	2.22	..	..	22.7	28.75
" "	Ammd. Phosphate	'95	6.00	8.04	3.00	3.56	1.00	2.70	10.00	14.30	9.00	11.60	1.50	1.29	1.00	1.39	20.00	22.50
		'96	.....	7.77	.....	3.83	1.00	1.40	10.00	0.17	9.00	11.60	1.50	2.09	1.00	2.80	2.50	28.00
" "	Pure Bone Dust	'95	.....	...	....	....	.....	...	23.00	22.96	.....	.....	3.71	4.46	..	..	30.25	32.75
		'96	.....	.....	....	.....	.....	..	23.00	23.07	...	....	4.50	4.03	....	..	33.00	31.25
" "	Champion with Potash	'95	....	....	..	.....	.....	..	.....	.....	.....	.....	...	..	..	..	..	..
		'96	.....	8.00	..	2.92	....	1.00	.....	11.92	....	10.92		2.72	....	6.1	32.25	35.25
" "	Victor Phosphate	'95	.....	.....	..	.....	.....	..	.....	....	..	.....	....	..	....	..	..	..
		'96	.....	4.16	....	2.70	1.00	0.64	7.00	7.50	6.00	6.86	0.82	1.01	1.00	1.25	14.50	16.00
Northwestern Fert. Co., Chicago, Ill	"H. S. B." Fine Raw Bone	'95	.....	.....	....	.	.....	..	22.00	23.41	.....	.....	3.29	4.00	....	..	28.00	31.50
		'96	.....	.	...	.	.....	.....	22.00	22.97	.....	....	3.29	4.25	..	...	28.00	32.00
" "	"H. S. B." Garden City Phosphate	'95	4.00	5.64	4.00	2.63	4.00	4.10	12.00	12.37	8.00	8.27	2.05	2.27	0.54	1.12	22.75	25.00
		'96	4.00	5.09	4.00	4.09	4.00	1.65	12.00	10.83	8.00	9.18	2.05	2.62	0.54	1.4	22.7	26.75
" "	"H. S. B." Potato Grower	'95	3.50	5.82	3.50	2.34	2.00	3.78	9.00	11.94	7.00	8.16	2.46	3.06	2.00	2.81	25.2	31.25
		'96	3.50	4.14	3.50	4.40	2.00	1.32	9.00	9.86	7.00	8.54	2.46	3.00	2.00	3.18	25.25	30.50
" "	"H. S. B." Prairie Phosphate	'95	3.00	5.01	3.00	1.89	3.00	4.36	9.00	11.26	6.00	6.90	1.64	1.73	?	0.35	17.75	20.00
		'96	3.00	4.08	3.00	3.01	3.00	4.09	9.00	11.18	6.00	7.09	1.64	2.25	..	..	17.75	22.25
Ober G. & Sons Co. Baltimore, Md	Farmers' Standard Ammd. Phosphate	'95	6.00	7.08	2.00	2.09	2.00	2.59	10.00	11.76	8.00	9.17	1.75	2.10	1.50	2.29	21.50	26.00
		'96	6.00	7.75	2.00	2.33	2.00	0.50	10.00	10.58	8.00	10.08	1.75	2.01	1.50	3.00	21.50	26.25
" "	Diss. Bone Phos	'95	10.50	12.51	3.50	2.59	2.00	1.72	16.00	16.82	14.00	15.10	....	...	...	....	15.75	16.50
		'96	10.50	13.25	3.50	2.65	2.00	1.37	16.00	17.27	14.00	15.90	..	....	..	....	15.75	17.00
" "	Shenandoah Bone Phosphate	'95	3.50	7.80	4.50	2.07	3.00	0.93	11.00	10.80	8.00	9.87	1.65	1.72	1.75	2.96	22.00	24.95
		'96	6.00	8.19	2.00	2.68	3.00	1.07	11.00	11.34	8.00	10.87	1.65	1.65	2.00	3.05	22.25	25.25
" "	Special Ammd. Diss Bone	'95	6.00	8.82	2.00	3.03	2.00	1.93	10.00	13.78	8.00	11.85	1.25	1.83	1.50	2.30	19.00	26.50
		'96	6.00	8.90	2.00	2.81	2.00	0.70	10.00	12.41	8.00	11.71	1.25	1.84	1.50	2.20	19.00	25.50
" "	Special Mixture for Wheat	'95	5.00	8.82	3.00	2.55	2.00	0.74	10.00	12.11	8.00	11.37	1.00	1.00	1.50	2.74	18.00	22.00
		'96	5.00	7.90	3.00	2.62	2.00	1.28	10.00	11.80	8.00	10.52	1.00	1.62	1.25	2.66	17.50	24.50
" "	S. & S. Special Wheat Compound	'95	6.50	7.63	2.00	2.31	1.50	1.08	10.00	11.02	8.50	9.94	1.40	1.77	2.00	3.00	20.75	25.00
		'96	6.50	7.38	2.00	2.47	1.50	0.64	10.00	10.49	8.50	9.85	1.40	2.29	2.00	2.41	20.75	26.50
Old Dominion Guano Co., Norfolk, Va	High Grade Alkaline Bone	'95	.....	7.20	....	3.60	.....	1.90	?	12.70	10.00	10.80	...		2.00	1.99	14.75	15.75
		'96	....	7.62	.....	3.46	....	2.45	....	13.50	10.00	11.08	...	.	2.00	3.14	14.25	18.00

TABLE I.—ANALYSES OF OFFICIAL SAMPLES OF COMMERCIAL FERTILIZERS FOR 1895 6.—Continued.

NAME OF MANUFACTURER.	NAME OF BRAND.		Soluble Phosphoric Acid Guaranteed.	Soluble Phosphoric Acid in Official Sample.	Reverted Phosphoric Acid Guaranteed.	Reverted Phosphoric Acid in Official Sample.	Insoluble Phosphoric Acid Guaranteed.	Insoluble Phosphoric Acid in Official Sample.	Total Phosphoric Acid Guaranteed.	Total Phosphoric Acid in Official Sample.	Available Phosphoric Acid Guaranteed.	Available Phosphoric Acid in Official Sample.	Nitrogen Guaranteed.	Nitrogen in Official Sample.	Potash Guaranteed.	Potash in Official Sample.	Valuation calculated from Guaranteed Analysis.	Valuation of Official Sample.
Old Dominion Guano Co., Norfolk, Va.	High Grade Phos. for Wheat	'95	.....	7.86	...	6.16	....	1.72	[illegible]	15.74	15.00	14.02		....	..	....	14.00	15.50
		'96	.....	.....	..	....	...	....	....	.....	.....	.....	....	....	....	....	.....	.....
" "	Special Wheat Guano	'95	.....	3.07	...	5.67	. .	1.98	?	10.62	8.00	8.64	1.65	1.76	2.00	1.92	21.00	22.75
		'96	.....	7.36	....	1.91	....	1.14	....	10.41	8.00	9.27	1.65	1.65	2.00	3.45	21.00	24.50
" "	Royster's High Grade Acid Phos.	'95	.....	9.83	....	3.51	....	2.54	?	15.88	12.00	13.34	...	....	....	....	13.00	15.50
		'96	....	12.14	...	2.40	....	1.49	. ..	16.03	12.00	14.54	..	....	. .	....	13.00	16 00
" "	High Grade Bone Phosphate	'95	.....	.....	....	....	..	....	....	.....	.....	.....	....	....	....	....	.....	.....
		'96	.....	11.39	...	3.02	....	1.85	....	16.26	13.00	14.41	....	.	....	....	14.00	16.00
Orth Ella, Wheeling, W. Va.	Ohio Valley Bone Dust	'95	.....	.....	....	.....	....	...	9.95	27.04	.....	.....	1.85	1.96	....	..	15.75	26.25
		'96	...	.....	....	....	...	....	....	.....	.....	.....	....	...	....	....	.....	.....
Pacific Guano Co., Boston and New York	A No. 1 Phosphate	'95	.....	.....	...	....	...	....	....	.....		.....			....	....	.....	.....
		'96	4.00	3.67	3.00	6.63	1.00	4.40	8.00	12.70	7.00	9.30	1.03	1.26	1.50	2.07	16.75	21.75
" "	Diss. Bone and Pot ash	'95		.....	....	.....	.	.....	...	.....	...	.....	...	...	...	....	..	.....
		'96	8.00	7.08	2.00	5.89	. .	2.74	10.00	14.61	10.00	12.97	...		2.00	2.19	14.25	18.25
" "	Diss. Bone Phos. of Lime	'95	.....	.....	....	....	...	...		.....		.....	....	..	....	...	.....	.
		'96	9.00	11.72	3.00	4.16	1.00	1.53	13.00	16.31	12.00	15.88		....	...	....	13.50	17.00
" "	Nobsque Guano	'95		.....	...	....	...		...	.....	.....	.....	. .	....	....	....	.....	.....
		'96	5.00	4.39	3.00	6.55	1.00	3.50	9.00	13 31	8 0	10.84	1.15	1.27	2.00	1.88	19.00	22.75
" "	Fine Ground Bone	'95	....	.....	...	....	....	....	....	.....	....	.....		...	....	....	.....	.....
		'96	.....	.....	....	....	...	....		17.27	...	.....	1.65	1.95	....	..	.....	20.50
Powell Fert. & Chemical Co., Balto., Md.	Diss. S. C. Bone	'95	12.00	10.93	2.00	3.26	2.60	0.91	16.60	15.10	14.00	14.19	.	..	....	...	....	15.25
		'96	7.00	11.37	7.00	3.54	2.00	1.06	16 00	15.97	14.00	14.91	....	..	...	....	15.75	16 00
" "	Bone and Potash Fertilizer	'95	... .	9.40	....	1.89	....	1.19	?	12.48	10 00	11.29	....	....	2.00	2.44	14.25	16.50
		'96	.....	6.48	...	4.20	2 00	1.12	16 00	11 80	14.00	10.68		...	2 50	2.34	19.25	16.00
" "	Hard Times Fertilizer	'95	....	8.68	..	1.61	....	2.22	?	12.50	7.00	10.28	1.03	1.4	2.50	2.35	17.75	23.50
		'96	.....	.	....	.	....	....		.....	.....	.....	..	..	....	....	.....	.....
" "	Prepared Chemicals for Composting	'95	.....	4.98	...	1.20	.	1.37	?	7 87	8.00	6 48	1.61	1.03	7.50	8.05	28.75	26.00
		'96	.....	....	...	....	...	....		.....	...	.....	.		....	....		.....

Powell Fert. & Chem. Co., Baltimore, Md.	Red Bag Fertilizer.	'95	....	9.60	..	1.52	...	2.39	?	13.51	8.00	11.1[illegible]	1.65	1.59	2.00	4.55	21.00	28.00
		'96	.....	....	....	..	.	..	.....	....	.....	....	..	.	...	....	....	.....
Quinnipiac Co., New York.	Uncas Bone Meal....	'95	.....	...	....	.	...	..	.....	....	.....	....	....	..	..	....	....	.....
		'96	.....	...	....	....	..	....	?	16.6[illegible]	?	....	1.6[illegible]	2.10		.	.....	20.50
" "	Diss. Bone & Potash	'95	.....	....	....	....	....	....	....	....	....	....	....	..	..	.	....	....
		'96	.....	5.28	..	5.61	1.00	3.09	11.00	13.9	10.00	10.8[illegible]	..	..	2.00	2.25	14.75	16.75
" "	Soluble Diss. Bone.	'95	....	.....	....	....	..	....	....	....	....	....	....	....	...	.	....	....
		'96	10.00	10.75	2.00	3.56	1.00	1.19	13.00	15.50	12.00	14.31	..		..	...	13.50	15.50
" "	Mohawk Fertilizer..	'95	....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		'96	5.00	4.45	2.00	3.66	1.00	1.80	8.00	9.99	7.00	8.11	1.00	1.14	1.00	1.34	15.00	18.25
" "	Climax Phosphate..	'95	.....	.....	....	....	..	..	....	....	....	....	....	..	.	....	....	.....
		'96	7.00	3.34	1.00	5.75	1.0	2.1	9.00	11.2	8.00	9.0[illegible]	1.25	1.52	2.00	2.59	19.50	23.00
" "	Potato Phosphate..	'95	....	....	..	....		....		....	.....		....	..	....	....	....	.....
		'96	6.00	3.95	2.00	6.02	1.00	2.8[illegible]	9.00	12.8	8.00	9.97	2.50	2.08	3.00	3.25	27.00	28.00
" "	Market Garden.....	'95	.....	.....	....	....							....	..	....	....	....	.....
		'96	6.00	4.67	2.00	3.58	1.00	2.0[illegible]	9.00	10.3	8.00	8.25	1.00	3.50	7.00	6.50	38.00	38.50
Ramsbug Fert. Co., Frederick, Md.,	Diss. Bone Superphosphate.....	'95	10.00	8.66	3.00	4.13	2.0	1.34	15.00	14.6	13.00	12.79	...	....	..	..	15.00	14.75
		'96	.....	9.76	....	4.34	1.00	1.70	15.00	15.8[illegible]	14.00	14.10	....	...	....	....	15.25	15.75
" "	Excelsior Plant Food	'95	7.00	6.98	2.00	2.64	3.00	3.4[illegible]	12.00	13.1	9.00	9.62	1.6[illegible]	2.30	1.00	1.41	21.75	20.50
		'96	7.00	5.75	3.00	3.44	4.00	4.02	13.00	13.[illegible]	9.00	9.19	1.6	2.05	1.00	0.90	22.25	24.25
Rasin Fertilizer Co., Baltimore, Md.	Acid Phosphate....	'95	9.00	13.05	5.00	2.68	1.00	1.2	15.00	17.0	14.0	15.73	.	...	....	...	15.25	16.75
		'96	....	....	....	..	..	..	....	....	....	....			....	..	....	.....
" "	Bone & Potash.....	'95	9.00	8.75	3.00	3.41	1.00	1.6[illegible]	13.00	13.[illegible]	12.0[illegible]	12.16	....	....	1.25	2.18	15.00	17.25
		'96	9.00	7.15	3.00	5.89	1.00	0.78	13.00	13.83	12.0[illegible]	13.04	....	....	1.25	1.56	15.00	16.50
" "	Dissolved Bones....	'95	5.00	8.31	5.00	2.24	2.00	3.49	12.00	11.0[illegible]	10.00	10.55	2.00	2.11	....	..	22.50	21.25
		'96	7.00	8.35	3.00	2.63	2.00	2.38	12.00	13.30	10.00	10.98	1.60	2.03	....	....	20.50	23.50
" "	Empire Guano.....	'95	5.00	8.29	3.00	3.40	1.00	1.65	9.00	13.3[illegible]	8.00	11.69	2.00	2.21	1.50	2.02	22.50	27.75
		'96	5.00	6.66	3.00	2.22	1.00	2.72	9.00	11.60	8.00	8.88	2.00	2.23	1.56	3.71	22.50	28.25
" "	Ammoniated Superphosphate	'95	.....	.....	...	..	..		.....	....	....		....	....	....	....		.....
		'96	6.10	6.95	2.00	3.85	1.00	1.65	9.00	12.4	8.00	10.90	0.83	1.08	1.00	1.17	14.50	20.00
" "	Walker's Diss. S. C. Bone..	'95	9.00	13.04	5.00	2.86	1.00	1.06	15.00	16.9	14.00	15.90	....	...	.	....	.....	.....
		'96	9.00	13.15	5.00	2.45	1.00	0.85	15.00	16.4	14.00	15.60	....	....	....	...	15.25	16.50
" "	Diss. S. C. Phosphate	'95	. .	.....		....		....	.....	.....	....	.....	....	....	....	..	....	.....
		'96	9.00	13.22	5.00	2.31	1.00	0.82	15.00	16.3	14.00	15.53	...	...	..	...	15.25	16.50
Reese, Jno. S. & Co., Baltimore, Md.	Diss. S. C. Phos. of Lime.....	'95	....	11.99	....	2.59	....	1.44	?	16.0	14.00	14.58	...	..	....	....	15.25	15.75
		'96	...	.....	...	....	.....	....	.....	..	....	....	....	.....	....	....	.....	
" "	Dissolved South Carolina	'95	.....	13.57	....	1.95	. ..	0.94	?	16.4	14.00	15.51	....	....	....	...	14.75	16.50
		'96	. ...	12.51	....	1.70	....	0.69	?	15.9	14.00	15.21	. ..	....	. ..	....	14.75	16.00
" "	Excellenza Soluble Guano	'95	.....	.	....	....	..	....	.....	....	.. .	.....	....	....	....	....	....	.....
		'96	3.00	0.53	5.50	8.31	2.00	1.81	10.50	10.6	8.56	8.84	1.85	2.19	1.20	1.72	22.25	21.75
" "	Elm Phosphate....	'95	.....	.....	....	..	....	....	.....	....	....	.....	....	...	...	....	....	.....
		'99	11.00	12.60	3.00	2.84	....	0.66	....	16.1	11.00	15.41	....	...	..	..	11.25	16.25
" "	Half and Half	'95	....	....	....	....	....		....	....								
		'96	4.00	0.58	4.00	8.45	...	1.93	.....	10.9	8.00	9.03	0.83	1.26	1.00	1.51	15.25	20.00
Samson Fertilizer Co. North East, Pa.	High Grade Fish Guano	'95	.. ..	9.93	...	1.23		0.34	.....	11.5	....	11.16	....	1.96	.	3.12	...	27.25
		'96	8.00	6.95	2.00	2.00	2.00	1.00	12.00	10.5[illegible]	10.00	9.55	2.00	2.00	2.00	2.23	25.25	21.75
Schenk, F. & Sons, Wheeling, W. Va.	Daisy Fertilizer ...	'95	.....	....	..		....	....	.....	.....	.....							.....
		'96	trace	trace	3.00	3.19	10.00	5.00	13.00	8.19	3.00	3.19	1.00	1.17	2.00	2.13	33.25	32.16

TABLE I.—ANALYSES OF OFFICIAL SAMPLES OF COMMERICAL FERTILIZERS FOR 1895-6.—Continued.

NAME OF MANUFACTURER.	NAME OF BRAND.		Soluble Phosphoric Acid Guaranteed.	Soluble Phosphoric Acid in Official Sample.	Reverted Phosphoric Acid Guaranteed.	Reverted Phosphoric Acid in Official Sample.	Insoluble Phosphoric Acid Guaranteed.	Insoluble Phosphoric Acid in Official Sample.	Total Phosphoric Acid Guaranteed.	Total Phosphoric Acid in Official Sample.	Available Phosphoric Acid Guaranteed.	Available Phosphoric Acid in Official Sample.	Nitrogen Guaranteed.	Nitrogen in Official Sample.	Potash Guaranteed.	Potash in Official Sample.	Valuation calculated from Guaranteed Analysis.	Valuation of Official Sample.
Scott Fertilizer Co., Elkton, Md.	Tip Top Soluble Bone	'95	.....	13.51	..	1.71	....	1.39	?	16.58	13.00	15.22	....	....	..	....	14.00	16.50
		'96	.....	12.60	..	0.91	....	0.46	.....	14.97	13.00	13.51	....	...			14.00	14.50
" "	Tip Top Soluble Bone & Potash	'95	....	11.73	..	2.69	...	0.85	?	15.27	11.00	14.42	....	....	2.00	2.95	15.25	19.75
		'96	.....	9.74	....	3.72	....	0.74	.....	14.20	11.00	13.46	.	....	2.00	3.05	15.25	19.00
Slingluff & Co., Baltimore, Md.	Corn & Oats Fertilizer	'95	10.00	11.02	3.00	2.97	1.00	0.68	14.00	14.67	13.00	13.99	..	..	2.50	3.16	18.00	19.75
		'96	11.00	10.80	2.00	2.88	....	0.97	....	14.65	13.00	13.68	....	...	2.50	2.94	17.50	19.25
" "	Diss. South Carolina Phosphate	'95	12.00	11.93	2.00	3.57		0.65	14.00	16.15	14.00	15.50	....	....	....	..	14.75	16.25
		'96	13.00	12.19	1.00	1.89	..	1.42	....	15.50	14.00	14.08	....			...	14.75	15.50
" "	Universal Guano	'95	7.00	9.32	2.00	2.59	1.00	0.67	10.00	12.58	9.00	11.90	0.90	1.03	2.00	2.41	18.50	22.00
		'96	8.00	8.78	1.00	2.48	....	1.61	....	12.87	9.00	11.26	0.83	1.10	2.00	2.43	17.50	22.25
" "	Special Bone Phos.	'95	.....	..	....	....	...	..	.....	....	..	.....	....	....	....	..	.....	....
		'96	8.00	10.64	4.00	2.34	....	1.65	....	14.63	12.00	12.98	0.83	0.93	..	..	17.25	18.50
Susquehanna Fert. Co. Baltimore, Md.	XXV Phosphate	'95	....	4.08	...	4.59	2.30	2.30	10.00	10.97	8.00	8.67	1.00	1.21	1.00	1.51	17.25	19.75
		'96	.....	7.35	...	1.89	2.00	1.95	1.03	11.19	8.00	9.24	1.00	0.99	1.00	4.86	17.25	23.75
" "	Diss. S. C. Bone	'95	.....	11.70	....	2.63	1.00	1.28	15.00	15.61	14.00	14.33	..	...	..	..	15.25	15.50
		'96	....	11.15	....	3.82	1.00	1.63	15.00	16.60	14.00	14.97	..	....	..	....	15.25	16.25
Thomas, I. P. & Sons Co., Philadelphia.	Farmers' Choice	'95	.....	7.86	..	2.55	2.00	1.85	11.50	12.26	9.50	10.41	1.61	1.81	2.00	2.42	23.00	25.25
		'96	5.50	7.63	4.00	2.88	...	1.91	9.50	12.42	9.50	10.51	2.00	1.30	2.00	3.36	24.00	24.25
" "	Improved Superphosphate	'95	.. ..	9.37	.	2.78	2.00	0.92	14.00	13.07	12.00	12.15	0.42	0.70	.	...	16.25	17.25
		'96	5.00	7.12	5.00	3.58		0.63		11.33	10.00	10.70	0.50	0.90	0.50	1.02	14.75	18.25
" "	Normal Bone Phos.	'95	....	7.55	...	3.13	3.00	1.42	11.50	12.10	8.50	10.68	1.03	1.21	1.50	1.85	19.00	21.50
		'96	4.50	6.52	4.00	2.32		1.42		10.26	8.50	8.84	1.25	1.40	1.25	2.47	18.50	21.25
" "	Pure Ground Bone	'95	....	.....	.	...	..	....	22.00	21.39	....	.....	3.69	3.21	....	...	30.00	27.50
		'96	.....	.....	..	.	....		21.00	23.71	.....	.....	4.00	3.96	..	....	30.00	31.50
" "	S. C. Phosphate	'95	...	10.41	....	3.21	2.00	2.33	15.00	15.99	13.00	13.62	....	..	....	...	15.00	15.50
		'96	8.00	10.81	6.00	2.53	...	1.96	.....	15.30	14.00	13.34	....	....	...	..	14.75	15.75
" "	Potato Manure	'95	.....	.....	....	....	...	....	.....	.....	..	.....	....	....	..	...	.....	.....
		'96	5.00	7.05	4.00	2.25	....	1.36	....	10.69	9.00	9.33	3.00	2.89	6.00	6.82	24.25	36.00

Thomas, I. P. & Sons Co., Philadelphia	Special Corn Fertilizer	'95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		'96	5.00	4.06	5.00	6.11	.....	2.72	.....	12.92	10.00	10.17	..	...	.	8.10	20.75	24.50	
Travers, S. W. & Co. Richmond, Va.	Beef Blood & Bone	'95	6.00	7.78	2.00	1.74	1.00	1.41	9.00	10.93	8.00	9.52	1.65	1.55	1.00	1.42	20.00	21.50	
		'96	6.00	5.92	2.00	2.31	1.00	2.94	9.00	12.17	8.00	9.23	1.65	1.88	1.00	1.48	20.00	23.75	
" "	Capitol Diss. S. C. Bone	'95	7.00	9.19	3.00	2.45	1.00	2.25	11.00	13.89	10.00	11.64	...	..	....	.	12.00	13.75	
		'96	9.00	10.12	3.00	2.20	1.00	1.20	13.00	13.57	12.00	12.32	..	..	...	.	13.50	14.00	
" "	Champ. Corn Grower	'95	5.00	6.16	3.00	3.42	1.00	1.62	9.00	11.20	8.00	9.58	0.82	1.20	2.00	2.00	17.25	20.75	
		'96	6.00	5.07	2.00	4.14	1.00	1.18	9.00	10.39	8.0	9.21	0.83	1.10	2.00	2.40	17.25	20.25	
" "	National Tobacco Fertilizer	'95	6.00	6.64	2.50	1.88	1.00	1.65	0.50	10.17	8.50	8.52	1.85	3.86	2.25	2.23	23.00	33.50	
		'96	6.00	6.27	2.50	3.10	1.00	1.82	9.50	11.19	8.50	9.37	1.85	2.04	2.25	2.86	23.0.	26.25	
" "	Standard S. C. Bone	'95	9.00	11.07	4.00	2.90	1.00	1.04	14.00	15.01	13.00	13.97	..	..	..	....	14.50	15.25	
		'96	.	...	.....	...	....	.....	.....	.....	.....	.....	...	..	....	...	.....	.....	
" "	Diss. Bone Phos.	'95	.....	.....	...	..	.....	.....	.....	.....	.....	.....	...	...	...	...	.....	.....	
		'96	10.00	10.11	4.00	3.29	1.00	2.23	15.00	15.63	14.00	13.40	....	...	...	....	15.25	15.25	
Tygart-Allen Fert Co. Philadelphia.	Diss. S. C. Rock	'95	.....	14.78	...	1.56	....	1.27	?	17.61	14.00	16.34	...	...	....	...	14.75	15.25	
		'96	.....	.....	...	....	....	..	.....	.....	.....	.....	...	...	...	...	.....	.....	
" "	Gold Edge Potato Guano	'95	6.00	6.40	...	2.07	....	0.72	?	9.19	6.00	8.46	2.47	2.73	5.00	5.04	27.75	31.75	
		'96	.....	.....	....	..	....	..	.....	.....	....	...	..	..	...	...	.....	...	
" "	High Grade Diss. S. C. Bone	'95	.....	...	...	..	....	..	.....	...	...	...	...	....	....	...	.....	...	
		'96		12.28	....	3.12	.....	0.48	....	15.88	14.00	15.40	.	....	.	..	14.75	16.25	
" "	Star Bone Phos.	'95	....	7.85	....	2.51	..	1.51	?	11.87	8.50	10.36	1.85	1.89	2.50	3.62	23.00	27.50	
		'96	.....	.....	...	....	...		.....	.....	....	.....	....	.	..	..	.....		
" "	Star Ground Bone	'95	.....	.....	....	...	....	....	20.50	24.03	.....	....	4.29	4.18	...	....	30.75	32.50	
		'96	..	.....	.	...	....	..	.....	.....	.....	...	..	...	....	....	.....	.....	
" "	Soluble Bone & Potash	'95	... ..	8.81	.	2.97	...	1.01	?	12.79	10.00	11.78	...	.	2.00	2.13	14.25	16.50	
		'96	.....	.....	...	....	...	...	.....		.....	.....	..	..		....	.. ..	.. ..	
Va. & Carolina Chem. Co., Richmond, Va	Acid Phosphate	'95	..	...	...	...	....	...	.....		.....	.....	...	..	...	..	.....	.....	
		'96	9.00	13.11	5.00	3.63	....	1.96	14.00	18.70	14.00	16.74	....	....	....	.	14.75	18.00	
Walker, Stratman & Co., Pittsburg, Pa.	Big Bonanza	'95	9.00	8.47	2.00	4.2	4.00	2.73	15.00	15.48	11.0	12.75	1.67	1.42	2.00	2.14	22.55	25.25	
		'96	10.00	9.03	1.00	2.14	4.00	1.29	15.00	12.46	11.00	11.17	1.75	1.77	2.00	2.62	25.75	25.75	
" "	Four Fold	'95	7.20	4.98	0.80	2.48	3.00	0.92	11.00	8.38	8.00	7.46	0.82	1.44	1.00	1.37	16.75	19.00	
		'96	7.00	6.10	1.00	3.78	3.00	1.37	11.00	11.25	8.00	9.88	1.00	1.54	1.00	2.00	16.75	22.50	
" "	Bone and Meal	'95		.....		....	....	....	.....	.....	....	.....	....	.	....	.	.....	.....	
		'96	.....	.....	..	..	....		13.00	7.69	.....		3.75	3.19	...	...	21.25	19.00	
" "	Potato Special	'9	8.10	9.98	0.90	2.25	2.00	0.49	13.00	12.72	9.00	12.23	1.63	1.41	5.00	4.62	27.00	27.25	
		'96	8.00	7.30	1.00	2.17	4.00	1.40	13.00	10.87	9.00	8.47	1.75	1.63	5.00	6.11	28.50	28.75	
" "	Pure Raw Bone Meal	'95	.....	..	....	.....	....	....	22.00	24.53	....	....	3.29	3.61	..	. ..	28.00	30.75	
		'96	...	.....	...	..	.	.	22.00	24.17	.....	...	3.25	3.75	....	...	28.00	31.00	
" "	Tobacco Special	'95	9.90	8.39	1.10	1.79	4.00	0.69	15.00	10.87	11.0.	10.18	1.65	1.83	2.00	2.34	25.25	24.50	
		'96	.....	.....	....	....	.....	....	.....	.....		.....	..		..	....	....	....	
" "	Help Mate	'95	.....	.....	....	..	....	....	.....	.....	.....	.....	..	....	...	....	.....	.....	
		'96	11.00	6.59	1.00	4.17	1.00	0.70	13.00	11.46	12.00	10.76	....	....	..	. ..	13.50	12.50	
Wheeling Butchers Asso. Wheeling, W. Va	Ohio Valley Bone Dust	'95		.....	....	..	....	....	.....	.....	.....	.....	....	..	...	.....	.....	.....	
		'96	.....	....	.		..	....	21.87	21.87	.....	.....	3.32	3.32	....	...	28.00	28.00	
Williams & Clark Fert Co., New York.	Acorn Brand Acid Phosphate	'95	10.00	12.10	2.90	1.98	1.00	1.26	13.00	15.34	12.00	14.08	....	.	..	..	13.50	15.50	
		'96	10.0.	9.79	2.00	4.33	1.00	1.51	13.00	15.63	12.00	14.12	...	....	..	...	13.50	15.50	
" "	Carteret Ground Bone	'95	....	....	...	..	..	..	14.00	14.82	...	.....	2.00	2.80	....	....	18.50	22.00	
		'96	....	....	...		...	..	14.00	17.09	.....	....	2.00	2.20	.	..	18.50	21.25	

TABLE I.—ANALYSES OF OFFICIAL SAMPLES OF COMMERCIAL FERTILIZERS FOR 1895–6.—Continued.

NAME OF MANUFACTURER.	NAME OF BRAND.		Soluble Phosphoric Acid Guaranteed.	Soluble Phosphoric Acid in Official Sample.	Reverted Phosphoric Acid Guaranteed.	Reverted Phosphoric Acid in Official Sample.	Insoluble Phosphoric Acid Guaranteed.	Insoluble Phosphoric Acid in Official Sample.	Total Phosphoric Acid Guaranteed.	Total Phosphoric Acid in Official Sample.	Available Phosphoric Acid Guaranteed.	Available Phosphoric Acid in Official Sample.	Nitrogen Guaranteed.	Nitrogen in Official Sample.	Potash Guaranteed.	Potash in Official Sample.	Valuation calculated from Guaranteed Analysis.	Valuation of Official Sample.
Williams & Clark Fert. Co., New York.	Potato Phosphate Good Grower	'95	5.00	5.53	1.00	3.50	1.00	2.15	7.00	11.54	6.00	9.38	2.00	2.43	5.00	5.40	26.00	32.00
		'96	5.00	4.18	1.00	3.36	1.00	2.58	7.00	10.12	6.00	7.54	1.50	1.33	5.00	5.80	23.25	25.50
" "	Prolific Crop Producer	'95	4.00	5.80	2.00	3.70	1.00	2.77	7.00	12.31	6.00	9.54	0.90	1.42	1.00	2.60	14.50	23.25
		'96	4.00	4.59	2.90	3.27	1.00	1.79	7.00	9.65	6.00	7.86	1.00	1.16	1.00	1.37	15.00	18.25
" "	Pure Bone Meal	'95	....	....	....	....	....	....	20.00	29.53	....	....	2.04	2.64	....		22.25	30.25
		'96	....	....	....	....	....	....	20.00	22.90	....	....	3.00	3.35	....	....	25.75	28.75
" "	Royal Bone Phosphate	'95	6.00	6.61	1.00	3.41	1.00	2.10	8.00	12.12	7.00	10.02	1.08	1.21	2.00	2.48	17.75	22.00
		'96	6.00	4.73	1.00	4.84	1.00	3.31	8.00	12.88	7.00	9.57	1.25	1.40	2.00	2.24	18.50	23.00
" "	Diss. Bone & Potash	'95	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		'96	....	7.62	....	4.23	....	2.58		14.43	10.00	11.85	....	..	2.00	2.22	14.25	17.50
" "	Universal Amm'd Diss. Bone	'95	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		'96	6.00	6.31	2.00	4.29	1.00	1.98	9.00	12.58	8.00	10.60	2.00	2.12	2.00	2.60	23.25	27.50
" "	High Grade Special	'95	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		'96	5.00	4.78	2.00	3.69	....	1.86	...	10.33	7.00	8.47	3.80	3.54	7.00	7.36	38.00	39.50
Wooldridge Fert. Co. Baltimore, Md.	"KKK." Kangaroo Komplete Kompou'd	'95	....	5.41	..	4.58	2.00	3.33	11.00	13.22	8.00	9.99	1.64	1.75	2.00	2.27	21.75	25.00
		'96	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
" "	Orchlla Guano	'95	....	4.05	..	0.66	.	11.78	15.00	16.49	?	4.71	....	....	..	..	10.25	12.50
		'96	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
" "	Quickstep	'95	....	4.55	....	5.05	3.00	3.76	11.00	13.36	8.00	9.60	2.27	2.52	3.00	3.40	27.00	30.46
		'96	....		....	....	....	....	....	....	....	....	....	....	....	....	....	....
" "	16 to 4 Bone & Potash	'95	...	3.07	....	6.94	...	2.99	?	13.00	8.00	10.01	.	....	2.25	2.20	13.00	16.25
		'96	....	8.70	..	3.27	.	0.99		12.87	11.00	11.97	....	....	2.00	2.18	15.00	16.75
" "	Sockless & Shoeless	'95	...	3.84	..	6.31	2.00	4.50	10.00	14.65	8.00	10.15	1.03	1.26	1.25	1.52	17.75	22.25
		'96	....		....	....	....	....	....	....	....	....	....	....	....		....	....
" "	XXtra Florida Acid Phosphate	'95		11.11	...	3.80	....	1.26	?	16.17	14.00	14.91	....	....	...	..	14.95	16.25
		'96	....	10.72	...	3.51	....	1.14	....	15.37	14.00	14.23	...	....	...	....	14.75	15.50
" "	Triumph	'95	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
		'96	....	7.40	....	2.31	..	0.70	?	10.40	8.00	9.70	1.50	1.32	4.00	4.13	23.00	24.00

Wooldrige Fert. Co., Baltimore, Md.	Little Giant	'95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		'96	.....	7.30	...	2.18	....	0.90	.....	10.38	9.00	9.48	1.00	0.8	2.00	2.61	18.50	19.50
" "	Chieftain Phosphate	'95	.....	.....	.....	.....	...	...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		'96	.....	8.10	..	1.29	...	1.68	.....	11.07	9.00	9.39	1.65	1.75	1.50	2.31	21.00	23.75
Tell Guano Co., Baltimore, Md.	Diss. Bone Phos	'95	7.00	12.61	6.00	2.33	2.00	1.71	15.00	16.65	13.00	14.94	....	....		..	15.00	15.25
		'96	7.00	12.56	6.00	1.72	2.00	1.60	15.00	15.88	13.00	14.28	...	....	....	.	15.00	15.75
" "	Diss. S. C. Phos	'95	7.00	10.81	5.00	2.46	..	0.75	?	14.02	12.00	13.27	....	....	....	..	13.00	14.50
		'96	7.00	11.33	5.00	2.23	2.00	1.60	14.00	15.16	12.00	13.56	....	.	.. .	...	14.00	15.25
" "	Economizer	'95	5.00	9.55	4.00	1.72	2.00	0.60	?	11.87	9.00	11.27	0.82	1.30	1.00	2.21	17.00	22.50
		'96	5.00	9.18	4.00	2.13	2.00	1.08	11.00	12.49	9.00	11.31	0.82	1.04	1.00	1.53	17.00	20.50
" "	Pure Ground Bone	'95	.....	.....	....	....	....	....	20.00	21.93	.....	.....	3.28	3.85	....	..	26.75	30.00
		'96	.....	.....	...	....	.....	...	2.00	21.72	.....	.....	3.28	4.00	....	..	20.00	30.50
" "	Calvert Guano	'95	5.00	10.07	4.00	2.70	2.00	1.84	11.00	14.61	9.00	12.77	0.62	0.83	1.50	1.96	16.75	21.50
		'96	5.00	9.15	4.00	1.79	2.00	1.18	11.00	12.12	9.00	10.94	0.62	0.83	1.50	1.88	16.75	19.50

MISCELLANEOUS FERTILIZERS.

DEALERS.	BRAND.	Water.	Insoluble Water.	Iron and Alumina.	Calsume Sulphate.	Sodium Chloride.
Foster Brown & Co.	Retsofsalt "C" (1895)	Trace.	Trace.	Trace.	Trace.	98.54
" " "	" " (1896)					98.65

DEALERS.	BRAND.	Potash Guaranteed.	Potash in Official Sample.
Bonday, Jas. Jr., & Co.	Old Reliable Brand Genuine Kainit (1895)	12.40	12.53

DEALERS.	BRAND.	Iron and Alumina.	Insoluble Matter.	Magnesium Sulphate.	Calcium Carbonate.
Leiersay, S. R.	Gympsum (so called) (1896)	Trace.	Trace.	Trace.	98.16

TABLE II.—ANALYSES OF INSPECTOR'S SAMPLES FOR 1894 AND 1895.

NAME OF MANUFACTURER.	NAME OF BRAND	No. of Samples Average.	Total Phosphoric Acid.	Available Phos. Acid.	Nitrogen.	Potash.	Relative Commercial Value.	No. of Samples Average.	Total Phosphoric Acid.	Available Phos. Acid.	Nitrogen.	Potash	Relative Commercial Value.
Allison and Addison	Acid Phosphate	1	14.60	1.30	....	..	14.19	2	10.30	10.01	.....	..	[illegible]
	Anchor Brand Tobacco Fertilizer	1	11.77	9.42	2.77	1.86	28.75	..	..	....	....	..	....
	Star Brand Guano	1	9.96	8.80	1.91	2.32	24.00	1	10.59	9.08	2.34	1.87	25.75
Atlantic & Va. Fertilizer Co.	Crenshaw's Acid Phosphate	1	15.10	13.54	....	.....	15.00	..	....	..	....	..	....
	Our Acid Phosphate	1	15.80	13.18	....	....	14.75	..	..		....	....	....
Baltimore Guano Co.	B. G. Ammoniated Bone	.	....	....	....	....	....	*1	11.92	8.63	1.55	2.29	22.75
Baugh & Sons Co	Double Eagle Phosphate	.	....	...	.. ..	...	..	2	12.57	9.70	3.04	1.10	29.50
	Export Bone with Potash	..	....	..	....	....	...	1	12.04	....	2.62	2.10	22.75
	General Crop Grower	..	...	.. ..	...	..	....	2	11.39	9.61	1.88	1.55	23.75
	High Grade Acid Phosphate	..	...	...	..	...	....	2	16.15	14.91	...	....	16.00
	Pure Raw Bone Meal	..	....	....	....	....	. .	1	22.53		3.84	..	20.25
Bradley Fertilizer Co.	Potato Fertilizer	..	....	....	....	..	....	*1	14.30	10.61	2.17	3.44	29.50
Chemical Co. of Canton	Baker's Spec'l W. C. & G. Mixture	1	11.33	9.66	1.14	2.04	20.50	.	..		....	....	....
	Potato Manure	..	....	.	....	..	.....	1	12.24	11.11	....	5.10	20.25
Cincinnati Desiccating Co.	Complete Garden Truck	..	...	....	..	....	....	*1	13.57	12.92	2.89	5.67	37.00
	Gilead Phosphate	1	14.32	8.18	2.54	2.39	29.00	1	13.77	11.35	3.41	2.22	34.00
	Ohio Valley Phosphate	1	15.48	10.35	1.94	2.03	26.75	..	....		. .	...	...
	Phoenix Phosphate	1	13.37	9.56	1.73	1.05	23.00	..	...	...	....	..	...
	Pure Acidulated Bone	1	18.92	....	3.83	....	28.25	.	....		..	..	....
	Tobacco and Potato Fertilizer	.	...	..	....	....	...	1	13.15	11.65	....	5.74	21.75
Chesapeake Guano Co.	Dissolved Bone Phosphate	2	16.23	14.78	....	...	16.00	.	.	....	...	...	....
Cleveland Dryer Co.	Buckeye Amm'd Bone Superphos.	5	14.07	10.82	2.05	.25	24.25	2	13.38	11.00	1.98	.23	24.25
	Ohio Seed Maker	2	15.70	12.42	1.47	..	22.50	..	...	..	..	..	....
	Potato and Vegetable Fertilizer	.	....	...		....	...	2	11.44	8.32	3.11	2.99	31.50
	Square Bone	4	13.71	8.72	2.35	....	24.50	3	13.23	10.25	2.41	. ..	25.25
	Superior Bone Meal	1	22.08	...	3.04	....	27.25	1	20.83	...	2.99	....	26.25
	XXX Phosphate	2	15.63	12.57	..	..	15.00	..	15.98	14.75	..	....	16.00
Detrick Fert. & Chemical Co.	Soluble Bone Phos. and Potash	2	14.34	13.07	..	2.10	17.50	2	11.77	10.71	.	2.24	15.75

TABLE II.—ANALYSES OF INSPECTOR'S SAMPLES FOR 1894 AND 1895.—Continued.

NAME OF MANUFACTURER.	NAME OF BRAND.	No. of Samples Average.	Total Phosphoric Acid.	Available Phos. Acid.	Nitrogen.	Potash.	Relative Commercial Value.	No. of Samples Average.	Total Phosphoric Acid.	Available Phos. Acid	Nitrogen.	Potash.	Relative Commercial Value.
Great Eastern Fertilizer Co.	Corn Fertilizer	..	....	..	.	....	....	..	10.93	9.56	1.09	2.89	21.24
	Dissolved Bone	.	...	..	..	....	...	2	14.93	13.57	....	....	15.05
	Soluble Bone and Potash	..	....	...	....	..	...	1	13.47	10.63	...	2.41	16.75
	Vegetable Vine and Tobacco Fert.	..	....	....	....	....	....	1	11.80	9.24	2.20	3.63	28.30
Durham Fert Co.	High Grade Acid Phosphate	..	...	....	...	....	..	1	12.92	11.86	....	..	13.50
Hess, S. M. & Bro	Emperor Phosphate	..	....	...	....	....	....	1	11.80	10.44	....	1.17	14 00
Jarecki Chemical Co	Lake Erie Fish Guano	3	13.07	8.83	1.06	.54	18.50	*1	14.96	9.15	.81	1.53	19.75
Loudenbach Fertilizer Co.	Urbana Bone Phos. and Potash	1	6.47	4.91	.81	1.96	14.75	1	15.35	12.39	2.63	3.86	33.50
	Urbana Prize Pot. & Tob. Grower	1	12.66	10.46	1.29	4.84	26.25	..	..	...	....	...	....
Lister's Ag'l Chemical Works	Harvest Queen	1	11.54	8.53	1.97	1.76	24.75	..	....	....	..		..
	Standard Phosphate	1	12.72	10.33	2.41	2.03	27.50	.	...	...		....	...
	U. S. Phosphate	..	....	....	..	....	...	1	11.77	9.61	2.59	2.22	28.25
Maryland Fert. & Mfg. Co.	Globe Complete Manure	..	....	....		....		1	11.59	9.89	2.00	1.99	25.00
Mt. Airy Mfg. Co.	Diss. Bone Phos. Potash Goods	1	12.76	10 20	....	·95	14.25	2	11.84	10.35	...	.86	13.75
	S. C. Bone Phosphate	..	....	...	..	..	..	1	16.07	13.95		.	15.75
	Piedmont Potato Producer	..	...	....	..	..	....	2	8.13	6.41	2.12	4.52	26.50
	Piedmont Pure Raw Bone Mixture	1	10.36	7.23	1.05	1.05	17.50	..	..	...	...		...
	P. G. Amm'd Superphate of Lime	2	10.14	8.57	1.20	1.00	18.50	*1	10.98	8.97	.85	1.08	17.25
	Royal Amm'd Bone and Potash	..	....	....	....	...	...	1	11.10	10.65	2.29	3.38	29.00
Newburgh Fertilizer Co.	Amm'd Phosphate	..	...	....	..	...	...	1	15.60	11.05	1.13	1.23	22.00
	Champion Fertilizer	1	12.41	10.13	2.38	...	24.50	..	...	....	....	..	....
	Pure Bone Dust	..	....	....	...	....		..	...	...	...		...
Northwestern Fertilizer Co.	H. S. B. Garden City Superphos.	..	....		..	...	....	3	19.49	14.03	3.46	1.58	37.00
	" " Fine Raw Bone	2	23.98	....	4.10	...	32.25	3	24.38	...	4.03	...	32.25
	" " Potato Grower	..	...	....	....	....	..	1	12 98	9.47	2.50	3.54	30.25
	" " Prairie Phosphate	1	13.52	9.62	2.48	...	25.50	2	11.53	7.60	2.00	.42	22.00
Ober, G. & Sons Co.	Bone Meal	..	..	....	..	....	.	*1	22.02	.	3.95	....	30.50
	Dissolved Bone Phosphate	1	15.47	14.08	...	....	15.50	1	17.50	16.32	...	...	17.25

Ober, G. & Sons Co	Farmer's Standard Amm'd Phos.							2	11.12	8.68	2.28	.13	26.25
	Shenandoah Bone Phosphate	1	14.66	9.21	2.20	1.77	27.00						
	Special Amm'd Dissolved Bone	1	11.72	10.19	1.76	2.00	24.25	1	12.40	11.12	1.28	1.93	22.25
	Special Mixture for Wheat	1	12.19	10.36	1.27	2.21	22.25						
Old Dominion Guano Co	High Grade Acid Phosphate	2	15.20	13.58			15.25						
	Special Wheat Guano	1	9.94	8.80	2.21	2.20	25.25						
Orth, Ella	Ohio Valley Bone Dust							1	18.00		2.56		23.00
Powell Fert. & Chemical Co	Bone and Potash Fertilizer							2	12.02	10.38		2.33	15.75
	Dissolved S. C. Bone	1	16.48	11.92			16.25	1	15.54	13.56			15.25
	Green Bag Fert. for Strawberries							*1	7.61	5.70	3.71	3.89	33.25
	Hard Times Fertilizer							1	7.22	6.13	1.01	3.84	19.25
	Potato Producer							*1	6.23	4.76	1.20	3.02	19.50
	Pure Raw Bone Meal							1	22.13		4.31		31.75
	Red Bag Fertilizer							2	11.01	9.12	1.66	1.80	22.75
Reese, John S. & Co	Diss. Bone Phosphate of Lime							1	16.71	15.24			16.50
	Excellenza Soluble Bone							*1	11.85	10.03	.99	1.74	19.50
	Half and Half Guano and Lis. Bone							*1	11.09	13.13	.75		18.56
Samson Fertilizer Co	XXXX Acid Phosphate							*1	13.92	12.41			14.25
	High Grade Fish Guano							*1	12.33	10.45	1.37	2.16	22.75
Scott Fertilizer Co	Pure Ground Bone	1	23.51		3.93		31.25						
	Tip Top Soluble Bone	1	16.54	14.73									
Slingluff & Co	Universal Guano							1	12.86	11.25	.74	2.21	16.25
Susquehannah Fertilizer Co	Alkaline Bone Phosphate							*1	12.56	10.92	.95	2.17	20.75
	Dissolved S. C. Bone							2	15.88	12.70			15.00
	Fine Ground Bone							*1	21.28		3.07		26.75
	XXV Phosphate	1	10.39	9.15	1.07	1.53	19.00	*2	11.85	10.03	.89	1.06	18.75
Swift & Co	Pure Raw Bone Meal	1	25.56		4.12		33.25	*1	26.16		3.99		33.00
Thomas, I. P. & Sons Co	Farmer's Choice Bone Phosphate	1	11.88	10.05	2.00	3.00	26.75						
	Improved Superphos							1	14.28	12.81			14.50
	S. C. Phosphate							1	15.06	13.68			15.25
Travers, S. W. & Co	Capital Diss. S. C. Bone							1	12.81	10.99			12.00
Thompson & Edwards	Sure Growth Superphos	1	13.13	7.44	1.00	.30	17.50	*1	12.83	7.56	.86	.38	16.25
Walker Stratman & Co	Big Bonanza							1	12.77	10.17	2.00	2.91	27.00
	Four Feet	1	8.47	6.08	2.67	1.15	21.25	1	11.28	9.83	1.22	1.15	19.75
	Potato Special							1	13.32	12.03	1.33	5.05	17.50
	Pure Raw Bone Meal							1	23.04		4.03		31.25
Williams & Clark Fert. Co.	Acorn Brand Acid Phosphate							2	14.05	12.86			14.75
	American Pure Raw Bone							1	23.27		3.35		29.00
	Carteret Ground Bone							*1	16.29		2.30		21.00
	Prolific Crop Producer							2	10.92	7.78	1.28	1.74	20.00
	Potato Phosphate							1	9.32	7.13	2.51	5.36	30.50
	Royal Bone Phosphate							2	12.24	9.31	1.68	2.54	24.25
Zell Guano Co	Calvert Guano							1	12.29	11.24	.87	2.24	20.50
	Dissolved Bone Phosphate	4	15.72	14.10			15.50	4	15.72	14.60			15.75
	Dissolved S. C. Phosphate							*2	14.75	13.30			14.75
	Pure Ground Raw Bone							1	22.60		3.86		30.50

*Brands marked with a star were not on record at the time they were sampled by the Inspector.

ERRATA.

On page 414 the Valuation of Nitrogen should be 15 cents per lb. instead of 12.

On page 416, column 8, line 20, read 2.00 for 2.40; column 10, line 10, read 10.90 for 19.90.

On page 418, column 6, line 24, read 4.67 for 4.07; column 8, line 9, read 2.12 for 1.12; column 9, line 16, read 20.00 for 22.00.

On page 419, column 1, line 20 read "XX tra" for "XX Fra."

On page 420, column 1, line 1, read "Duncan P. P." for "Duncan P. Q.;" column 8, line 46, read 1.33 for 3.33; column 11, line 5, read 8.00 for 9.00.

On page 422, column 10, line 20, read 13.00 for 0.13; column 18, line 39, read 25.00 for 24.95.

On page 423, column 6, line 27, read 1.50 for 1.20; column 8, line 12, read 3.40 for 4 40; column 17, line 21, read 16.00 for ——

On page 424, column 10, should read as follows: 13.51, ——, ——, 16.68, ——, 13.98, ——, 15.50, ——, 9.91, ——, 11.20, ——, 12.82, ——, 10 33, 14.63, 15.80, 13.11, 13.21, 17.01, ——, 13.81, 13.83, 14.04, 13 36, 13 34, 11.60, ——, 12.45, 16.96, 16.45, ——, 16.35, 16.02, ——, 16.46, 15.90, ——, 10.65, ——, 16.10, ——, 10.96, 11.50, 10.55, ——, 8.19.

On page 425, column 9, line 14, read 10.80 for 1.08; column 18, line 12, read 19.50 for 18.50; same column, line 26, read 12.25 for 12.75.

On page 426, column 1, line 33, read "Bone and Meat" for "Bone and Meal;" column 5, line 45, read 2.00 for 2.90; column 6, line 4, read 3.31 for 2.31; column 9, line 9, read 9.50 for 0.50; column 12, line 36, read 9 47 for 8.47.

On page 428, column 1, line 5, read "Zell" Guano Co. for "Tell" Guano Co : column 9, line 12, read 20.00 for 2.00.

On page 429, last line, read "Livesay" for "Leiersay."

On page 430, line 1 should read as follows: "Allison and Addison, Acid Phosphate 1, 14.80, 12.96, ——, ——, 14.75, 2, 15.28, 13.97, —— ——, 15.25."